

An aerial photograph of a river delta. On the left side, there is a dense, green forested area. The river flows from the top left towards the bottom right, where it branches into multiple channels. The channels are characterized by light-colored, sandy banks and intricate, braided patterns. The water in the channels varies in color, from deep blue to a turbid, reddish-brown hue, indicating sediment transport. The overall landscape is a mix of natural vegetation and eroded, sandy terrain.

Australasian Catchment Water Improvement Standard

November 2025

Version Control

Australasian Catchment Water Improvement Standard

Version 1.0

Contact

Eco-Markets Australia, Australasian Water Credit Scheme administrator www.eco-markets.org.au

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Eco-Markets Australia, as the administrator of the Australasian Catchment Water Improvement Standard (ACWIS) and Scheme

www.eco-markets.org.au

Acknowledgements

Eco-Markets Australia acknowledges the Traditional Owners of Country and acknowledges their continuing connection to land, waters and community. We pay respect to Country, the people, the cultures and the Elders past and present.

Over the past five years, Eco-Markets Australia has administered Reef Credits, Australia's first environmental market mechanism dedicated to water improvement. This pioneering program has facilitated public and private sector investment in on-land projects that deliver tangible, measured and independently verified water improvement outcomes for the Great Barrier Reef.

Reef Credits provide a financial incentive for landholders to implement changes in land management practices under approved Methodologies.

To date, tens of thousands of Reef Credits have been issued, sold, and retired, demonstrating the strength and scalability of this market-based solution. Eco-Markets Australia continues to uphold the highest standards of integrity, aligning the program with global best-practice frameworks and embedding robust governance mechanisms to ensure confidence in every credit.

The knowledge and experience gained through the administration of Reef Credits has informed the development of the Australasian Catchment Water Improvement Standard, a multi-national framework that recognises and rewards landholders for their role in delivering catchment water improvement outcomes in defined catchment settings. This evolution reflects our ongoing commitment to expanding environmental markets that drive positive outcomes for landholders, communities, and ecosystems across Australasia.

This document may be cited as the Australasian Catchment Water Improvement Standard Version 1.0 - 6 November 2025.

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1. Introduction

1.1 Objective

The Australasian Catchment Water Improvement Standard (ACWIS) is the framework for the Australasian water improvement credit Scheme. Its objective is to ensure that water improvement credit projects meet stringent environmental, financial and community integrity conditions. This is required in order to effectively contribute to the achievement of respective water targets, or the non-exceedance of caps, described in relevant water quality improvement plans or comparable strategies for defined catchment settings, including any subsequent revisions to those water quality targets or caps. The ACWIS may also be applied to defined catchment settings such as river basins for which Environmental Values (EVs) and Water Quality Objectives (WQOs) have been set under regulatory instruments, and where such EVs or WQOs specify metrics for pollutant targets or caps. To support this objective, the ACWIS sets out the specific rules and requirements that must be satisfied to develop water improvement Projects and Methodologies; validate, register, monitor, and verify Projects; and issue, track and transfer water improvement Credits, amongst other matters.

The ACWIS encourages the inclusion of First Nations peoples in the design and implementation of water improvement Methodologies and Projects, incorporating perspectives, practices and knowledge systems.

1.2 Governance

Eco-Markets Australia and its Board (the Board) administer the ACWIS with Eco-Markets Australia acting as the Secretariat (Secretariat). The Secretariat is empowered to manage and oversee all aspects of the Scheme with support from the Board and the Eco-Markets Australia Technical Advisory Committee.

The Secretariat's role and responsibilities include:

- Managing or overseeing all Scheme processes and procedures
- Managing the review and approval of water improvement Projects, including Validation, Registration and Verification
- Managing the review and approval of Methodologies under the ACWIS
- Managing the review, maintenance and approval of updates to the ACWIS
- Issuing, approving and/or updating all water improvement Credit documentation
- Issuing guidance and interpretation related to the ACWIS and Australasian water improvement Scheme
- Maintenance of the Registry, including issuance, transfer, and retirement of Credits
- Ensuring the integrity of the Australasian water improvement Scheme, including conducting reviews of stakeholder grievances
- Making decisions regarding the administration or operation of the Australasian water improvement Scheme, which may include input from the Technical Advisory Committee.

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

1.3 Interpretation

Definitions of words used in this document are set out in the Australasian Catchment Water Improvement Definitions (Definitions).

The ACWIS should be read in conjunction with the Australasian Catchment Water Improvement Guide (the Guide) which provides the rationale and principles underlying the ACWIS and serves as an aid to its interpretation.

The ACWIS is supported by other documents as follows:

- Australasian Catchment Water Improvement Guide
- Australasian water improvement Project Application and Crediting Procedure
- Australasian water improvement Methodology Application and Review Procedure
- Australasian Catchment Water Improvement Definitions
- Tool for the Demonstration and Assessment of Additionality in water improvement Projects (Additionality Tool)
- Eco-Markets Australia Fee Schedule (Fee Schedule)
- Eco-Markets Australia Verifier Application Procedure
- Eco-Markets Australia Claims Guidance
- Eco-Markets Australia Pipeline Listing Procedure
- Eco-Markets Australia Grievance Procedure
- Eco-Markets Australia Dispute Resolution Procedure
- Forms and templates.

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

1.4 Version

1. This is Version 1.0 of the ACWIS.
2. Version 1.0 of the ACWIS will apply from 6 November 2025.
3. Projects will be validated and registered against the version of the ACWIS 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 ACWIS for the remainder of the Crediting Period.
5. Credits generated by a Project are not tagged against specific versions of the ACWIS.

2. Scope and application

2.1 Scope

The scope of the ACWIS covers Projects that achieve water improvements in a defined catchment setting. A catchment setting may be defined by a specified set of ecological assets impacted or put at risk by poor water quality over a specified geographical extent, including the sources of specified pollutants. A defined catchment setting may be the setting defined in a water quality improvement plan or comparable strategy, or a river basin for which Environmental Values (EVs) and Water Quality Objectives (WQOs) have been set under regulatory instruments, and where such EVs or WQOs

specify metrics for pollutant targets or caps. Defined catchment settings to which the ACWIS currently applies are identified in Schedule 1.

The ACWIS stands beside the Reef Credit Standard. The Reef Credit Standard endures, applies and takes precedence in the Great Barrier Reef catchments.

2.2 Water improvement Credit metrics and Conversion Factors

1. A water improvement Credit is a quantified and verified amount of Pollutant that has been prevented from entering the defined receiving environment of the defined catchment setting. A water improvement Credit is equal to an amount of Pollutant reduction verified during a Monitoring Period, measured using a suitable metric or unit which quantifies the amount of Pollutant that has been prevented from entering the receiving environment of the defined catchment setting, and converted into water improvement Credits by applying the relevant Conversion Factor set out in Schedule 1.
2. The Conversion Factors represent the relative value of Pollutant reduction derived from the pollution reduction targets or caps described in relevant water quality improvement plans or comparable strategies, or from approved Water Quality Objectives for the defined catchment setting.
3. ACWIS recognises the extensive diversity of water pollutant types and the variation in water quality improvement plan or comparable strategy objectives, targets and caps applying to defined catchment settings. Appropriate Conversion Factors will be progressively determined in conjunction with Methodology development and the associated peer review and public comment processes for draft Methodologies under the Scheme. Conversion Factors, once determined, will be published in Schedule 1 on the Eco-Markets Australia website and maintained by the Secretariat.
4. In establishing Conversion Factors, ACWIS will apply a principle of reasonably equivalent benefit that reflects:
 - the water quality objectives, targets and/or caps in the water quality improvement plan or comparable Strategy relevant to the defined catchment setting, or a river basin for which Environmental Values (EVs) and Water Quality Objectives (WQOs) have been set under regulatory instruments, and where such EVs or WQOs specify metrics for pollutant targets or caps;
 - relevant indicator thresholds specified under the National Water Quality Management Strategy or a comparable authoritative technical reference source; and
 - as a reference value for reasonable equivalence, the established credit value of one water quality credit being equal to the reduction of one kilogram of dissolved inorganic nitrogen delivered to the Great Barrier Reef (Reef Credit Scheme).
5. Conversion Factors are specific to defined catchment settings, and the uniquely numbered credits are tagged against the relevant defined catchment settings so that claims attach to water improvement benefits achieved for specific localities (defined catchment settings) and claims of benefit are not transferrable between defined catchment settings.
6. The Conversion Factors may be periodically updated by the Secretariat to reflect published changes to the Pollutant reduction targets or caps approved in relevant water quality improvement plans or comparable strategies
7. The Secretariat will notify Project Proponents of any changes to Conversion Factors by means of direct notification to proponents of registered projects and by publishing the new Conversion Factors on the Eco-Markets Australia website.
8. Projects must apply the Conversion Factors that are current at the commencement of the Monitoring Period for which Credits are calculated.

NOTE: The Conversion Factor for Dissolved Inorganic Nitrogen (DIN) established in the Reef Credit Standard uses the number of kilograms (volume) set as the Reef 2050 WQIP DIN target as the number by which target volumes for other loads (fine sediment in tonnes) can be divided to obtain an equivalent proportional load reduction within that set of scientifically determined targets. This is a policy approach to Conversion Factor determination. The Reef Credits DIN Conversion Factor provides an established and accepted unit of value for the material benefit that can be claimed against one water quality improvement credit and hence provides an established reference value for reasonable equivalence for the ACWIS water improvement benefits.

2.3 Voluntary and compliance markets

Water improvement Credits may be used to meet water quality improvement commitments in a voluntary or compliance market. In the case of a compliance market, the relevant regulatory agency or agencies may accept water improvement Credits to satisfy a compliance obligation.

3. Project Rules

3.1 General eligibility requirements

A water improvement Project must meet minimum eligibility requirements as described in Section 3.1 to be validated under the ACWIS and the relevant water improvement Methodology.

3.1.1 Minimum standards for Project Proponents

A water improvement Project must have a Project Proponent. A Project Proponent must:

1. Comply with all applicable legislation and regulations of any jurisdiction applying to the relevant defined catchment setting.
2. Comply with all applicable codes of conduct or best practice guidance issued by the Secretariat.
3. Fulfill the eligibility requirements for an Eco-Markets Australia registry account holder.

3.1.2 Approved water improvement Methodology

A water improvement Project must use a water improvement Methodology (Methodology) approved by the Secretariat in accordance with the ACWIS. Projects must 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 In-scope (Acceptable) Project Activities

Except as excluded by one or more of the conditions specified below, the Activities within scope as acceptable for a defined catchment setting under ACWIS are those activities specified or otherwise reasonably included in the water quality improvement plan or comparable strategy for that defined catchment setting.

Without limitation, the Australasian water improvement Scheme excludes Activities that:

- Involve planting species that are not endemic to the bioregion 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 risks to native flora, native fauna, or native regional ecosystems.

3.2 Water improvement Project requirements

3.2.1 Project Start Date

1. The Project Start Date is the date on which the water improvement 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 water improvement 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 water improvement Credits.
5. The Crediting Period starts on the Project Start Date or, for projects requiring civil works, whichever occurs first:
 - 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: Monitoring Period).

3.2.3 Project location and Project site

1. The water improvement Project must be within the boundaries of the catchment setting as defined in the relevant water quality management plan or comparable strategy.
2. The water improvement Project site must be identified by a shape file(s) describing the extent of the Project Area, inclusive of GPS coordinates. 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 must use the Project Application Template.
3. All information in the Project Application shall 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 must specify the relevant Methodology under which the water improvement 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 water improvement Credits that may be created as a result of the Project.
2. The Project Proponent must obtain all regulatory approvals and permits and other relevant and material consents 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 water improvement 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. Where the withdrawal of a discretionary consent or discretionary approval by a third party may reasonably be argued to be arbitrary or unreasonable, such argument will be given weight by the Secretariat in managing non-compliance.

3.2.6 Other environmental credits

1. Project Proponents may not claim a credit for the same Pollutant reduction under the Australasian water improvement Scheme and another scheme.
2. Projects may generate other forms of environmental credits, such as biodiversity, carbon or renewable energy certificates provided the rules and requirements of each Scheme are adhered to and all eligibility and additionality requirements are satisfied.
3. Projects may generate water improvement Credits through more than one water improvement Methodology on the same land, provided all eligibility requirements are satisfied, and any claimed Pollutant reduction is claimed under only one Methodology.

3.2.7 Projects with multiple activities

1. Water improvement 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 must 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 must 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 any jurisdiction applying to the relevant defined catchment setting.
3. The water improvement Project must generate Pollutant reductions over and above reductions that would have occurred without the water improvement Project.
4. Where a Pollutant reduction has already been funded under a different scheme or program at the same Project site, a water improvement Project may still be undertaken either concurrently or consecutively. However, Credits may only be issued for a 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 schemes other than the Australasian water improvement 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. 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 water improvement 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 a water improvement Project 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 water improvement Credits into the Buffer Account. The Verifier will evaluate whether the Risk of Reversal Assessment Tool was correctly conducted and applied.
3. Water improvement 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 Australasian water improvement 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 water improvement Credits from the Buffer Account.
7. If a Reversal was caused by Non-compliance, the requirements dealing with Non-compliance will apply.

NOTE: 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 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 defined catchment setting in accordance with the relevant Methodology.

3.3 Baseline Scenario

The Project Proponent must calculate water improvement Credits generated using the relevant 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 clearly explained, supported by credible references¹, and demonstrably conservative to ensure there is no over estimation of water improvements.
4. At the conclusion of the Crediting Period, the Baseline Scenario must be reviewed and updated if the Project is to continue with a renewed Crediting Period.

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 a suitable metric or unit which quantifies the amount of Pollutant that has been prevented from entering the receiving environment of the defined catchment setting in accordance with the applied Methodology.
3. Pollutant reductions must be converted to water improvement Credits in accordance with the procedure described in Section 2.2.

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.

3.5 Monitoring

3.5.1 Monitoring

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

Project Proponents are encouraged to map their activities to relevant Sustainable Development Goals (SDGs) and associated indicators to support transparent reporting and align with international sustainability frameworks. Examples of relevant SDGs include (but are not limited to):

SDG	Title	Water Quality Focus
6	Clean Water and Sanitation	Freshwater quality and supply and pollution prevention
12	Responsible Consumption and Production	Freshwater quality and supply and pollution prevention
13	Climate Action	Build resilience to observed and projected impacts of climate change on water systems
14	Life Below Water	Marine and coastal water quality
17	Partnerships for the Goals	Enable progress on water related goals

3.5.2 Record keeping requirements

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

3.6 Validation and Registration

A proposed water improvement Project must be validated against the ACWIS and the chosen Methodology to be registered as a water improvement 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 ACWIS 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 Project Validation 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 ACWIS 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 ACWIS will be registered on 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 (location in defined catchment setting), Methodology, and water improvement Credits issued and retired in relation to registered Projects will be available on the Registry accessible on the Eco-Markets Australia website subject to the withholding of any information reasonably determined by the Secretariat at the request of the Project Proponent 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 water improvement Credit issuance

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

Water improvement 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 ACWIS and applicable Methodologies.

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

- a. An Application for Certification and issuance of water improvement Credits;
- b. One or more Monitoring Reports covering the period over which water improvement Credits are requested to be issued. If the Project Proponent intends to submit more than one Monitoring Report, a request for this aggregation of monitoring reports is required and approval is at the discretion of the Secretariat; 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 must 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 Verification of more than 5 consecutive Monitoring Periods for a Project.
7. The Verifier must confirm whether or not, and to what extent:
 - a. the ACWIS and applicable Methodology has been followed accurately and completely;
 - b. appropriate documentation and record keeping including Monitoring Reports is in place;
 - c. the amount of water improvement 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 water improvement 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. If a Verifier's assessment of pollutant reductions realised is in reasonable accord (with reasons provided in writing) with Pollutant reductions claimed, the Project Proponent's calculation of water improvement Credits in the Monitoring Report will be used to determine water improvement Credit quantities.
4. If the Verifier's assessment of pollutant reductions realised is not in reasonable accord (with reasons provided in writing) with the claimed Pollutant reductions, the Verifier and the Project Proponent may:
 - a. agree on the revised water improvement Credit quantities recommended by the Verifier; or
 - b. refer the issue to the Secretariat under the Grievance Procedure.

3.7.3 Water improvement Credit issuance

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

1. The Secretariat will notify the Project Proponent when certification is complete.
2. The Project Proponent may request water improvement Credit issuance as part of the Verification and certification or after Verification and certification are complete.
3. Each water improvement 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 water improvement Credit issued to the Project Proponent as set out in the Fee Schedule.
6. The verified water improvement Credits shall be issued into the Registry Account of the Project Proponent upon payment of the water improvement Credit issuance Fee.

7. A water improvement Credit will remain valid for five (5) years after the date that Credit was issued. Further details on the issuance processes are found in the Project Application and Crediting Procedure.

3.8 Tracking and transfer of water improvement Credits

3.8.1 Tracking and transfer of water improvement Credits

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

3.8.2 Water improvement Credit Retirement

1. A water improvement Credit must be retired on the Registry to claim a water improvement.
2. A water improvement Credit must be retired at the earlier of either:
 - a) The holder of a water improvement Credit making a claim to the water improvement associated with that 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 water improvement Credit was issued.
3. Once water improvement Credits are retired, the Registry will move the retired Credits into a Retirement Account.
4. Water improvement Credits in the Retirement Account cannot be transferred or used to claim any further water 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 water improvement Credits issued under previous versions, if any, of the ACWIS.
6. Further details on the water improvement 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 ACWIS will be subject to peer review and public consultation.

3. Methodologies may use direct measurement (eg. monitoring of one or more indicators relevant to the Methodology) and/or adequately calibrated and verifiable 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 ACWIS, as described in the Guide and the rules as described in the ACWIS, 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 relevant to all substantial matters of interest.
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. Where known and quantified, sources of model uncertainty should be identified and taken into consideration;
 - e. Models should apply conservative factors to discount for uncertainty;
 - f. Adequate field data must be used for model calibration and Verification of model outputs;
 - 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 ACWIS and the Guide and have been approved by the Board may be used for a water improvement 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 ACWIS 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 ACWIS; 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 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. Adequate and appropriate timeframes;
 - c. Data availability, reliability and limitations;
 - d. 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;
 - e. 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 must 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 at the point of input to adjacent waterways through deduction of the Baseline Scenario from the Project scenario.
3. For the purposes of 4.6.1 the Methodology must identify the sources and sinks relevant to the Methodology of the relevant Pollutant 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 water improvement Credits, the deduction as a result of Project Leakage within the defined catchment setting.

4.8 Approval of new Methodologies

1. Any Project Proponent, Stakeholder, Person or interested party 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 in-scope activity that will lead to Pollutant reduction.
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 ACWIS Principles.
4. New Methodologies will be subjected to technical peer review and a thirty (30) day public consultation process.
5. Peer reviewers will be appointed by the Secretariat to ensure Methodologies are conceptually 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 may utilise the Technical Advisory Committee to provide specialist input to this process.
7. Approved Methodologies will be made available to all prospective Project Proponents on the Eco-Markets Australia website.

4.9 Revising water improvement Methodologies

1. Water improvement 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 will be subject to review by the Secretariat and a 30-day public consultation period.
 - c. Major revisions, which will 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 water improvement Methodologies may be initiated by a Methodology Developer, the Secretariat or a third-party.
4. Responsibility for bearing the costs of revisions, as per the Eco-Markets Australia Fee Schedule, 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 water improvement Projects;
 - b. Water improvement Credit issuance, including ensuring water improvement Credits issued are in accordance with the ACWIS;
 - c. Holding, transferring and retiring water improvement Credits;
 - d. Recording transaction prices and periodically making summary information available to the public to support market transparency;
 - e. Maintaining records of water improvement 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. Comply with all applicable legislation, regulation, codes of conduct or best practice guidance issued by the Secretariat; and
 - b. Pass the fit and proper person test, and
 - c. Fulfill the eligibility requirements for an Eco-Markets Australia registry account holder.
3. Water improvement Project information is available on the Registry located on the Eco-Markets Australia website, subject to commercial-in-confidence and sensitivity considerations determined at the Secretariat's discretion.
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 Water Improvement 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.
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 Australasian 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 of 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 (CER) 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 ACWIS within thirty (30) days of detection.
2. Any Person or Stakeholder may report actual or anticipated Non-compliance through the Grievance Procedure.
3. The Secretariat will investigate any reported or suspected Non-compliance and may require the Technical Advisory Committee to assist as the Secretariat sees fit.

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, the Secretariat may, at its discretion cancel the Project.

Schedule 2 – 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. (Ref. Question 3) 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. (Ref. Question 3) 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%