

9 March 2026

Professor Karen Hussey
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Department of Climate Change, Energy, the Environment and Water

via consultation portal and email: ACCUMethods@dcceew.gov.au

Dear Karen,

RE: Draft *Carbon Credits (Carbon Farming Initiative) (Integrated Farm and Land Management) Methodology Determination 2026*

We write on behalf of the Carbon Market Institute's (CMI) Integrated Farm and Land Management (IFLM) Taskforce to provide consolidated feedback on the draft *Carbon Credits (Carbon Farming Initiative) (Integrated Farm and Land Management) Methodology Determination 2026* released for consultation by the Emissions Reduction Assurance Committee (ERAC) and Department of Climate Change, Energy, the Environment and Water (DCCEEW).

While Taskforce welcomes the release of the draft IFLM method, we must emphasise that this is long overdue. Given this method was prioritised in October 2021 with two prior consultations on preliminary technical drafts in 2022 by the Clean Energy Regulator (CER) and 2023 by DCCEEW, it is extremely disappointing that in its current form the method is restricted in scope compared to the original intention, and neither commercially nor technically viable.

Establishing a modular, whole-of-farm framework for land sector carbon farming method has long been a shared priority for a broad coalition of stakeholders and government, since the release of the [2019 Blueprint](#). With critical but targeted reforms, the IFLM method has the potential to become a foundational instrument for landscape-scale abatement across Australia's agricultural and rangeland systems. It could support integrated carbon, biodiversity and land management outcomes and strengthen the long-term durability of the ACCU Scheme in the land sector.

Without critical but targeted reforms, the consultation draft will have no or limited uptake. This outcome would risk Australia's ability to deliver its Agriculture and Land Sector Plan and have significant impacts for inter-related climate policies including the ongoing effectiveness of the Safeguard Mechanism.

The features of the consultation draft that require targeted and critical reform include:

1. An inflexible abatement architecture that inhibits the streamlined addition of modules and doesn't integrate both sequestration and avoidance activities.
2. A limited scope that is 'vegetation focused' and does not include soil, avoided clearing or

- livestock emissions management activities
3. Restrictive forest cover progression timeframes that may unnecessarily limit the geographical applicability of the method and miss significant eligible abatement
 4. A measurement approach tied to the FullCAM which embeds the current limitations of the public release FullCAM tool and precludes the main advantages of adopting higher accuracy measurement approaches
 5. Severe and compounding discounting mechanisms
 6. A binary classification and artificial distinction between land cleared and uncleared in a certain time period is spatially complex, hard to delineate and unduly focuses on one contributing factor to current land condition and is misaligned with a broad body of science.
 7. Constrained measurement approaches that limit the ability of environmental plantings and regeneration on cleared land to adopt emerging technologies
 8. A leakage approach that is overly onerous and not commensurate to risk
 9. Transition requirements are lacking in detail which will be critical to enable voluntary transition and uptake of additional land management practice changes

The Way Forward: Reforms to deliver the long-awaited IFLM method

While we have some critical concerns noted above, there are also some welcome features of the consultation draft. The central focus around land management strategy is welcome. The entry criteria for both regeneration modules are well aligned with CMI IFLM Taskforce proposals and stakeholder consultations.

In addition to responding to the consultation questions, this submission provides targeted suggestions on how the method could be reformed to address these barriers to uptake, and strengthen alignment with the Offsets Integrity Standards. It aims to ensure the method can be implemented at scale, and provide a pathway to continue to expand the scope of the method as new activity modules become available. In doing so we recognise the importance of enhancing integrity as a key driver of increasing participation and sustainability of the method.

The Taskforce is strongly committed to developing a scientifically robust method that can be operationalised, is commercially viable and delivers real and measurable abatement to contribute to our net zero emissions goals. For the method to succeed, projects under it must be capable of being originated, financed, delivered and maintained across the diverse ecological, operational and tenure contexts in which it is expected to operate, including those involving Indigenous landholders and consent-based governance arrangements.

Table 1 of the attached submission summarises the Taskforce's priority amendments to the draft method. Section 2 provides detailed supporting analysis, including how current design settings interact in practice and where targeted refinements would materially improve workability while preserving integrity. The submission focuses on areas where adjustment would improve deliverability and does not restate areas of agreement with elements of the draft that are already well aligned.

The views presented have been developed collaboratively through the CMI IFLM Taskforce and Technical Working Group and reflects a range of operational, technical and investment perspectives from across the land sector. Where there are any divergent views, these are noted in the submission.

Method Revision Process: unlocking time-critical land sector abatement

Apart from providing feedback on the critical but targeted reforms to the IFLM method and consultation questions, we believe it is critical to build a shared understanding of the process from here to method finalisation and that the Australian Government is accountable to deliver on this process and timeline given the history of protracted delays.

We propose the following key milestones from here to method finalisation:

1. ERAC consultation closes: **9 March 2026**
2. ERAC Secretariat to review feedback and provide independent advice to ERAC members: **by April 2026 ERAC meeting**
3. Critical reforms or gaps requiring expert working group agreed between DCCEEW, ERAC and stakeholders before **end March 2026**. Areas we understand are already mutually identified as priorities that could start immediately include:
 - a. Data sharing roundtable to enable reformed discounts
 - b. Reforms to proposed measurement approach (referred to as Hybrid FullCAM in consultation documents)
 - c. Remote sensing and sampling guidelines
 - d. Transition arrangements
4. DCCEEW method development team facilitates targeted expert working groups with agreed statements of work to resolve pathway on critical reforms: **from 9 March to May 2026**
5. Revised draft method provided to ERAC for consideration: **June 2026**
6. If required, ERAC conducts second 14-day consultation: **June / July 2026**
7. Final review and ministerial recommendation by ERAC: **July 2026**
8. Subject to ERAC advice, Assistant Minister Wilson legislates IFLM method: **August 2026**

We also call from the Soil Carbon Method Review to be finalised and integrated with the above process steps, so that a soil carbon module that mirrors the latest version of the soil carbon standalone method (including any potential changes as an outcome from the review) is incorporated in the revised method draft ahead of ERAC consideration in June 2026.

Additionally, we request a clear process is developed in parallel to the above timeline for how future priority modules will be developed and added, including avoided clearing, plantation forestry and avoided emissions from livestock as the highest priorities.

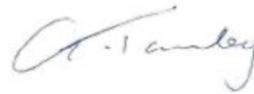
We welcome the opportunity to discuss this submission further and remain committed to working constructively with the ERAC and DCCEEW to ensure the final IFLM method is both robust and implementable.

Thank you for the opportunity to provide feedback and for the Department's ongoing engagement with stakeholders, including the Taskforce, on the development of the IFLM framework.

Yours sincerely,



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Co-Chair, CMI IFLM Taskforce
Co-CEO, Climate Friendly

Adam Townley
Co-Chair, CMI IFLM Taskforce
CEO, Ai Carbon



On behalf of the IFLM Taskforce, of which member organisations are listed below.

Agriprove	Gondwana Carbon
Anthesis	Indigenous Carbon Industry Network
Atlas Carbon	Indigenous Land and Sea Corporation
Aurecon	Kimberley Land Council
Ai Carbon	NRM Regions Australia
Australian Natural Capital	Pastoral Partners Australia
Bp	Pollination
Canopy	Refolia
CarbonLink	RegenCo
Carbon Management Services	RepuTex Energy
Carbon Neutral	SA Water
Climate Friendly	Select Carbon
CO2 Australia	Tasc
CORE Markets	TEM
Corporate Carbon	TerraWise
Covalent Land Australia	Upscale Carbon
Elders	Viridios

1. Priority Amendments to the Draft IFLM Method

The following section summarises the CMI IFLM Taskforce’s critical eight priority amendments to the draft IFLM method.

Table 1. Priority Structural Amendments Required to Support Integrity, Investability and Uptake of the IFLM Method.¹

Issue	Proposed solutions	ERAC considerations ¹
Issue 1: limited & inflexible core method inhibiting streamlined expansion of Modular structure		
<p>The draft modular framework is inflexible, overly limited in activity scope and would trigger wholesale legislative review and updates to the core method Determination each time that new activities, carbon pools or abatement calculation schedules are added. This is due to:</p> <ul style="list-style-type: none"> • Each activity and abatement calculation schedule being specifically named in the framework section of the method, requiring a core method review each time new activity or abatement calculation schedules are added; • Restriction of the parameters in the overarching abatement equation to summation of carbon stocks in the named schedules; and • Core method inhibiting expansion pathway: soil inclusion in phase 1 (see Priority area 2), 	<p>Methodology Determination reform:</p> <ul style="list-style-type: none"> • Introduce a generic summation term in the overarching abatement equation (i.e. Equation 2) that captures carbon stock changes and avoided emissions in all existing and future modules; • Refer to ‘all existing and future schedules’ in the method, rather than specifically naming activities; • Include the architecture (i.e. equations, carbon pools) in the core method framework, to allow future addition of avoided loss of sequestered carbon, and avoided emissions modules. • Include an avoided clearing module that mirrors the forthcoming update to the standalone avoided clearing method via the proponent-led method development process. 	<p>Including a more comprehensive set of activities and pools addresses the following OIS:</p> <ul style="list-style-type: none"> • Objects of the CFI Act: Provides incentives to carry out a broader range of project activities • Measurable & verifiable: Provides a more rigorous and reliable way of measuring or estimating relevant removals, emission reductions and project emissions • Evidence-based: Better reflects the impact of the abatement activity on emissions and removals • Project emissions: More comprehensively captures increases in emissions within the project boundary that occur as a consequence of undertaking the relevant abatement activity.

¹ ERAC considerations mean an assessment of the proposed solution against the Offsets Integrity Standard, and the Objects of the CFI Act (“to create incentives for people to carry on certain offsets projects”). This column draws on ERAC’s interpretation of the OIS as specified in this paper: <https://www.dcceew.gov.au/sites/default/files/documents/erac-information-paper-offsets-integrity-standards.pdf>

Issue	Proposed solutions	ERAC considerations ¹
<p>allow for future inclusion of avoided loss of sequestered carbon (eg: avoided clearing); and/or avoided emissions (eg: reduced livestock emissions, farm energy efficiency improvements).</p> <p>More detail on this issue is provided under consultation question 1.</p>	<p>Supporting processes:</p> <ul style="list-style-type: none"> Government should articulate a proponent-led module development process as a priority, providing a streamlined approval pathway for additional modules under the IFLM method. 	
<p>Issue 2. limited scope of initial method, particularly the exclusion of soil due to delays in completing parallel review</p>		
<p>Accounting for soil and vegetation carbon pools together is a foundational principle of an integrated, whole of farm carbon method, and was central to the original IFLM method blueprint.</p> <p>In the absence of soil in the IFLM method, proponents seeking to implement soil and vegetation carbon farming activities on one farm would need to run two or more ACCU projects concurrently, with non-overlapping area, each with its own complexity and transaction costs. This is typically cost prohibitive and was a key outcome the IFLM was seeking to address.</p>	<p>Methodology Determination reform:</p> <ul style="list-style-type: none"> Accelerate the ERAC review of the soil carbon method; and include soil as a module in the first release of IFLM, mirroring the standalone soil method to the greatest extent possible.² 	<ul style="list-style-type: none"> Objects of the CFI Act & other Government objectives: Inclusion of soil and vegetation together would provide incentives to boost tree cover / biodiversity in agricultural zones, particularly in intensive systems where such incentives are particularly needed. Evidence-based: Better reflects the impact of the abatement activity on emissions and removals Measurable & verifiable: More comprehensive carbon accounting captures any co-dependency between the different carbon pools

² A majority of Taskforce members are supportive of the inclusion of a soil carbon module as part of IFLM, with a minority not supportive. Concerns with inclusion of soil in IFLM are partially alleviated by the Taskforce position that the existing standalone methods such as soil carbon should be maintained on a standalone basis, and should remain open to service existing projects and new project registrations on a standalone basis.

Issue	Proposed solutions	ERAC considerations ¹
Issue 3: forest cover attainment requirement		
<p>The requirement that regeneration must achieve forest cover during the crediting period creates the following issues:</p> <ul style="list-style-type: none"> Rules out significant geographic regions that have longer ecological recovery timeframes; Exposes projects to significant back-ended risk, due to the necessity to remove CEA that does not achieve forest cover, even where genuine carbon sequestration has been measured and verified. This generates mistrust in the scheme, and could cause equity issues, if the property/ project changes ownership during the crediting period. 	<ul style="list-style-type: none"> Remove the requirement to achieve forest cover during the crediting period when using a measured approach. The existing gateway approach provides sufficient confidence that regeneration is progressing towards forest cover in line with Australia’s national accounts, without needing a specified timeframe for passing the threshold which is binary and applied to all ecosystems. If forest attainment is still required, the Department should convene a stakeholder workshop to discuss how the gateway system could manage this risk. 	<ul style="list-style-type: none"> Eligible carbon abatement: It is unclear why the method requires forest cover attainment during the crediting period. The justification on the basis of ‘consistency with the national accounts’ is not valid, because sequestration from sparse woody vegetation is included in the national inventory regardless of whether it forms forest cover.³ Measurable and verifiable: A measured approach is more accurate than the proposed FullCAM hybrid approach, and it does not rely on regeneration to cross a particular threshold to demonstrate progress, but rather only credits measured and verified increased in abatement.
Issue 4: requirement to use the FullCAM public release restricts the viability and unnecessarily complicates the proposed measurement approach		
<p>In linking the measure-model approach to FullCAM, some of the assumptions of FullCAM</p>	<p>Methodology Determination reform:</p> <ul style="list-style-type: none"> Remove the requirement to use FullCAM under 	<ul style="list-style-type: none"> Measurable and verifiable: The measurement using multi-phase sampling approach would be aligned with a Tier 3 IPCC method, which is

³ National Inventory Report 2022, Volume 1: “Increases and losses of woody vegetation that are not classed as forest land (called sparse woody vegetation) - both permanent and temporary -are reported under grassland remaining grassland, wetlands remaining wetlands and settlements remaining settlements” p. 300; and “To estimate the change in woody biomass due to the change in sparsely woody areas, the net annual change in area was placed in a Tier 2 model. The model uses an average woody biomass of 10 t DM ha⁻¹ (Raison et al. 2003) and where vegetation cover is observed to have been lost it presumes a linear loss of that amount over a period of 20 years. Where the area of sparse vegetation increases it is assumed that these will regrow to 10 t DM ha⁻¹ over twenty years (i.e. a growth rate of 0.5 t DM ha⁻¹ yr⁻¹) (Fensham, Fairfax and Dwyer 2012) and (Witt, et al. 2011).”

Issue	Proposed solutions	ERAC considerations ¹
<p>such as the shape of the growth curve and requirement for forest attainment have been carried over. These assumptions have unnecessarily restricted where historic regeneration projects can occur and are not necessary if a measurement using multi-phased sampling approach is adopted.</p> <p>The FullCAM hybrid approach fails to capture the main advantages of a measurement informed approach (i.e. more accurate measurements at two points in time with lower uncertainty and calculated change in abatement), by benchmarking measurements relative to the Tree Yield Formula, rather than simply calculating the net gain in abatement between measurements and statistically quantifying uncertainty of measurements.</p>	<p>the hybrid approach, and adopt a spatially explicit ‘measurement using multi-phase sampling’ approach instead</p> <ul style="list-style-type: none"> • This approach is broadly already included in the draft method (Schedule Y, ‘Step 6.2: Measure AGB in each CEA - Spatially explicit sampling’), except that Step 8.1(‘CEA-specific TYF calibration’) should be removed. • The proposed measurement approach removes the ability to conduct forward-projections of carbon stock, which means the TYF discount is no longer required. More detail on this proposal is provided in Section 2 of this document. • If these changes take place, many of the problematic safeguards (i.e. excessive discounting, 5tC rule, requirement to transition to forest cover) are no longer required, and these should be removed. 	<p>the most accurate type of reporting under UNFCCC requirements.</p> <ul style="list-style-type: none"> • Eligible carbon abatement: It is normal for project scale accounting to be more accurate than approaches used in the national inventory. For example, the FullCAM public interface is already different to the FullCAM used in the national inventory. • Conservative: A ‘measurement using multi-phase sampling’ is more conservative than the proposed FullCAM hybrid approach, as it does not allow ACCUs to be claimed based on forward-projections.
Issue 5: Multiple severe and compounding discounts		
<p>Attribution, sampling and model-related uncertainty discounts apply cumulatively and interact in ways that materially reduce issuance early in the crediting period relative to actual</p>	<p>Methodology determination reform:</p> <ul style="list-style-type: none"> • Discounts should be proportional to any risk or uncertainty that they are designed to manage 	<ul style="list-style-type: none"> • Evidence-based. The size of the TYF discount is not commensurate with the scale of risk and not data-informed. A measurement using multi-phase sampling provides a more appropriate balance of integrity, without the

Issue	Proposed solutions	ERAC considerations ¹
<p>abatement. The sampling discount requires higher accuracy and more costly measurement approaches, but applies a blanket and material discount to these compared to lower accuracy modelling approaches which seems to defy logic. The backloaded abatement profile is particularly problematic for financing decisions, given that discount rates prioritise near-term income, and misaligned with higher initial implementation costs.</p> <p>In combination, these settings reduce Net Present Value (NPV), delay value realisation and weaken project investability despite genuine abatement occurring on-ground.</p> <p>The attribution discount is mis-designed for its stated purpose. Attribution is already achieved via other method settings such as the robust project entry criteria, Land Management Strategy (LMS) requirements, and the gateway check system which requires demonstration of sustained progression in canopy cover, in direct contrast to baseline trends.</p>	<p>and be considered holistically to avoid compounding severity. They should reduce in line with accuracy and confidence tests.</p> <ul style="list-style-type: none"> • When considered alongside requested reforms such as the move to a ‘measurement using multi-phase sampling’, the TYF discount approach is not appropriate and should be removed. It should be replaced with the probability of exceedance approach similar to that used in the soil method, which is suitable for calculating statistically robust uncertainty associated with the difference in carbon stocks between two points in time. • The attribution discount should be removed. This objective is already achieved via the entry criteria, LMS and the gateway system. 	<p>need for large, arbitrary discounts.</p> <ul style="list-style-type: none"> • Objects of the CFI Act: The heavy discounting approach renders the method unviable, and if adopted, it would fail to provide incentives for people to carry on offsets projects. • Conservative: Under a ‘measurement using multi-phase sampling’ approach, abatement would only be credited in response to a measured increase in carbon stocks. This is more conservative than validating forward projections of carbon stock using FullCAM. • Measurable & verifiable: Under the measurement approach, uncertainty would be quantified using a probability of exceedance approach (similar to the Schedule 2 soil carbon method). This approach rewards investment in higher sampling effort and sophisticated measurement tools, as compared with discounting under the FullCAM hybrid approach.
<p>Issue 6: a binary and artificial distinction between land cleared and uncleared in a certain time period is misaligned with the science</p>		

Issue	Proposed solutions	ERAC considerations ¹
<p>The binary split between ‘cleared’ in the last 15 years versus ‘suppressed’ lands creates unnecessary administrative complexity, an artificial divide, is misaligned with the science around managed native regeneration, and will be difficult to implement and regulate in practice. It will artificially exclude large areas of land that has been cleared ago and had vegetation suppressed by grazing. Land that was cleared 16, 25, 50 or 100 years ago and subsequently heavily suppressed to prevent regeneration will have a different set of rules based on an arbitrary cut-off date, resulting in a complex spatial pattern (‘patchwork’) of areas that are cleared versus suppressed that often occur in close proximity</p> <p>The justification for why the monitoring and accounting pathway for cleared lands should be different, including having no or demonstrably different gateway requirements is unclear. These often-adjacent land areas may have the same</p>	<p>Methodology determination reform:</p> <ul style="list-style-type: none"> • The eligibility criteria for cleared and suppressed modules should be merged.⁴ • Method safeguards such as the gateway system (like those on existing HIR and NFMR projects) should also be applied on land with clearing history.⁵ • Clearing history is a contributory factor but should not be used as a primary triage mechanism between modules. Rather it should be treated as supporting evidence. Without other forms of suppression post clearing, the act of clearing alone is not sufficient to demonstrate suppression (i.e. land is cleared for agricultural purposes, not for the sake of clearing alone). • The reformed measurement approach should be available as an option for all vegetation projects. • The FullCAM option should remain available where clearing is identified as a material suppression agent, and where other eligibility factors for use of FullCAM are met (for 	<ul style="list-style-type: none"> • Conservative: The gateway checks as described in the guidelines on stratification, evidence and records should also apply on cleared lands aligned with the suppressed land module as the associated risks are very similar. • Measurable & verifiable: A reformed measurement and reporting approach applied across all vegetation projects will lead to more accurate abatement estimates that take into account the full range of suppression agents. • Additionality: Allowing a broader timeframe for the last comprehensive clearing event would allow for more areas that had suffered significant suppression post-clearing to be eligible. This would more accurately reflect the full range of suppression pressures, rather than focusing on historic clearing events in an artificially limited period of time. In many cases, the relevance of recent clearing alone (without sufficient evidence of other suppression agents preventing regeneration) may have diminished under recent EPBC Act reforms.

⁴ Not all Taskforce members agree with this recommendation. A minority of Taskforce members would prefer the current approach where the NFMR method is replicated in IFLM, citing reasons of method simplicity, and expedient delivery of the IFLM method.

⁵ Noting that the CER ‘Guidelines on stratification, evidence and records gateway system’ (May 2019) that introduced the gateway system, applied to both the HIR and NFMR method.

Issue	Proposed solutions	ERAC considerations ¹
<p>starting condition, require the same or similar practice changes to remove suppression, receive the same rainfall but will have different accounting and measurement processes.</p> <p>Due to the multiple interacting factors that affect land condition, establishing whether land has been cleared often requires multiple lines of evidence and interpretation in the same way that other forms of suppression require, as there is no single definitive national or state based dataset that detects all clearing.</p>	<p>example, <5tC biomass at project start, forest cover achieved within the project crediting period or revised gateway requirements).</p> <ul style="list-style-type: none"> If two modules are retained, the eligibility criteria for determining if land has been subjected to a clearing event should be based on a broader period and a range of factors rather than an artificial 15-year timeframe. Instead, a recommended approach is to adopt the expired NFMR method’s requirements which was not timebound but instead required appropriate evidence to prove comprehensive clearing had taken place. If this is not possible, the period for clearing should be extended to a minimum of 25 years, but preferably 50 years given the availability of satellite imagery and amount of detectable clearing events excluded by an arbitrary 15 year cut off. 	
<p>Issue 7: Inconsistent measurement approaches between vegetation management activities</p>		
<p>Currently the Environmental Plantings (EP) and regeneration on cleared land modules can only use FullCAM, and regeneration on suppressed land can only use FullCAM hybrid. This creates many technical and operational challenges and inefficiencies, as a single accounting and</p>	<p>Methodology determination reform:</p> <ul style="list-style-type: none"> The reformed measurement approach should be available for all vegetation management activity modules, not just regeneration on suppressed lands. 	<ul style="list-style-type: none"> Measurable & verifiable: Expanding the range of activities that can undertake measurement will lead to more accurate abatement estimates. Conservative: The reformed measurement approach is more conservative than a FullCAM approach, reducing any risk that

Issue	Proposed solutions	ERAC considerations ¹
<p>measurement approach is unable to be applied across an integrated project undertaking multiple activities. It also reduces incentives for existing EP and NFMR projects to transition to IFLM, by failing to offer alternative higher accuracy measurement approaches.</p>		<p>credited abatement is misaligned with outcomes and should be open to all vegetation modules.</p>
<p>Issue 8: Leakage approach is overly onerous and not commensurate to risk</p>		
<p>The proposed leakage management regime expands whole-of-farm accounting obligations to all land parcels under management of business enterprise. This creates overly onerous monitoring obligations disproportionate to the actual leakage risk. It would restrict option value of other land owned by the land manager, which would reduce participation by those with multiple land holdings. The leakage framework fails to account for historical clearing rates, and does not consider recent reforms to the EPBC Act.</p>	<p>Methodology determination reform:</p> <ul style="list-style-type: none"> Consider whether recent EPBC Act reforms are sufficient to address leakage. If not: Leakage provisions should only be triggered if material clearing exceeds historical rates. The scope of the Vegetation Accounting Area should be limited based on risk, for example to parts of the business enterprise within the same region or state, or only those States/Territories where clearing is permitted. 	<ul style="list-style-type: none"> Objects of the CFI Act: The proposed leakage approach will reduce participation in the method. Evidence-based: The proposed approach is not evidence based, and is highly likely to penalise business-as-usual clearing practices in the VAA. Project emissions: Given the protections afforded by the recently reformed EPBC Act, displacement of clearing activity is unlikely to trigger material emissions.
<p>Issue 9: Transition of existing projects to IFLM lacks clear and investable migration pathway</p>		
<p>The draft method does not clearly define how existing Environmental Plantings (EP), Native</p>	<p>Methodology Determination reform:</p> <ul style="list-style-type: none"> Define transition as a structured project entry 	<ul style="list-style-type: none"> Objects of the CFI Act: Clear and investable transition settings support continued

Issue	Proposed solutions	ERAC considerations ¹
<p>Forest from Managed Regrowth (NFMR), and Human-Induced Regeneration (HIR) projects, or other applicable methods, can transition into IFLM. Key uncertainties include treatment of legacy baselines and modelling assumptions, newness requirements where new activities or carbon pools are introduced, measurement pathway upgrades, crediting period settings, and clarity on consent requirements.</p> <p>There is also limited clarity regarding whether historic eligibility, leakage or accounting settings may be retrospectively reassessed following transition. Without explicit transition architecture, proponents cannot reliably assess the regulatory or commercial implications of migration. This uncertainty will discourage uptake and undermine the objective of incentivising land managers to voluntarily transition and adopt a broader suite of land management practice changes are part of an IFLM method.</p>	<p>pathway that applies prospectively and preserves previously issued ACCUs.</p> <ul style="list-style-type: none"> • Allow projects adopting additional activities, carbon pools or measurement approaches at transition to satisfy newness through an “in-lieu” pathway benchmarked to the original project registration date. • Transition projects establishes a new 25-year crediting period (with matching permanence extension). • Clarify baseline carry-forward rules and treatment of legacy data and modelling assumptions, including grandfathering or defined conversion rules where appropriate. • Confirm that transition is voluntary and that legacy standalone methods will continue to operate, and projects continue to be registered under them.. • Explicitly confirm that historic eligibility, consent requirements, leakage and accounting outcomes including that they do not retrospectively apply. 	<p>participation in the ACCU Scheme and reduce barriers to voluntary adoption of the integrated IFLM framework.</p> <ul style="list-style-type: none"> • Measurable and verifiable: Prospective application of updated measurement pathways preserves accounting integrity while allowing improved evidence and monitoring approaches to be adopted over time.

2. Consultation Questions and Indicative Taskforce Responses

The following responses have been developed by the Carbon Market Institute's Integrated Farm and Land Management (IFLM) Taskforce and Technical Working Group. These responses are reiterated and expand on the key issues presented in Table 1. The responses are coded as follows:

Observations and findings about the draft Methodology Determination are coloured in black font.

Recommendations to improve the draft Methodology Determination are in blue font.

Recommendations to improve the overarching scheme architecture are in a box.

Overall method architecture

Questions from DCCEE:

Q1. Are the modular framework provisions in the exposure draft sufficiently flexible to allow for the addition of activities, measurement technologies, and other carbon pools in the future?

Situation

The original vision for the method, as articulated in the CMI IFLM Taskforce Blueprint (2021), was for a “a ‘whole-of landscape’ framework integrating vegetation, soil and agricultural modules to allow land managers to generate abatement for multiple carbon farming activities on a single property.” Currently, the consultation draft IFLM method does not combine soil and vegetation pools, and it essentially only allows for two activities (i.e. planting and native regeneration).

The structure of the draft method contains:

1. an overarching framework section that provides ‘governance’ of the project; and
2. Schedules (which act as ‘modules’) containing rules bespoke to specific activities and a calculation approaches.

Conceptually this approach should create an enduring, stable framework section that need not be updated each time new activities or measurement approaches are added. If supported by a flexible, streamlined process for new module development, this structure could foster innovation and unlock abatement at scale, while ensuring the core method framework remains strong.

Issue

The current draft fails to achieve this aim. The method cannot expand without what have been historically slow bureaucratic processes involving legislative amendment. This is because:

- The core method framework contains numerous, hard-coded cross-references to named schedules, a precedent which would trigger a legislative update each time modules are added; and
- The overarching abatement equation only sums carbon from named Schedules, meaning it cannot cater for future new modules.

The narrow range of activities included in the draft method means it does not function as a fully integrated, modular framework. The method was intended to integrate both sequestration and avoidance within a single whole-farm system. The current architecture fails to allow for future inclusion of modules for avoided loss of sequestered carbon (eg: avoided clearing); and/or avoided emissions (eg: reduced livestock emissions, farm energy efficiency improvements).

Solutions

- Accelerate finalisation of parallel ERAC review and incorporate soil carbon into initial release of the method.
- Replace the restricted abatement equation with a module-neutral summation term covering all existing and future approved modules.
- Refer to approved Schedules generically rather than naming activities in the framework
- Build structural placeholders for avoided loss of sequestered carbon and avoided emissions
- Consolidate cross-cutting definitions into the overarching framework to ensure consistency within the method and with other carbon farming methods.⁷
- Consolidate stratification requirements into the overarching framework (or in the CFI Mapping Guidelines), to ensure consistency within the method and with other carbon farming methods.
- Create a streamlined proponent-led pathway to add modules without reopening the core Determination.

Q2. Will the IFLM method remove barriers to participation in the ACCU Scheme for land holders?

Our response: As drafted, the IFLM method does not remove key barriers to participation and in several respects introduces new ones, as described below.

Barrier 1. Excessive discounting

Situation

The exposure draft applies multiple discounting mechanisms including the Tree Yield Formula discount, the proposed Attribution Discount, and existing buffer and performance withholding.

Issue

These discounts compound and materially suppress early issuance. Cashflow is deferred to later years while establishment costs occur upfront. This significantly reduces project net present value and weakens the financial case for participation.

For projects generating approximately 300,000–450,000 ACCUs over 25 years, the combined effect may reduce project value by roughly 35–40 per cent. Early credit issuance (less than 3% in the first 10 years) is lower than the returns achievable from continuing livestock production, removing the incentive to change management practices.

The deferral of value also creates multi-decadal valuation uncertainty, complicates farm succession planning, reduces land saleability, and limits the ability of lenders to recognise carbon assets in underwriting decisions.

Solutions

- In the context of our recommended measurement approach, the TYF discount approach is no longer appropriate and should be removed. It should be replaced with the probability of exceedance approach currently used in the soil method, which is suitable for calculating the difference in carbon stocks between two points in time.
- The attribution discount should be removed. This objective is already achieved via the LMS and the gateway system.

Barrier 2. Hybrid FullCAM approach

Situation

The draft method proposes a hybrid model-measurement framework based on FullCAM calibration.

Issue

The hybrid FullCAM design embeds the limitations of the model without delivering the expected advantages of a measure-model framework. In rangeland regions, particularly in WA, SA and NT, limited calibration increases variance between measured outcomes and modelled benchmarks, creating uncertainty in credited outcomes and associated cashflows. Eligibility constraints, including the 5 t/ha commencement threshold and the requirement to transition to forest, further narrow participation by excluding substantial areas capable of measurable carbon gain following targeted land management practice changes. In addition, constraining credited growth to FullCAM trajectories in early years removes the incentive to invest in improved measurement technologies, as higher-accuracy data does not translate into earlier or increased crediting. The calibration requirement also increases implementation cost and complexity, requiring specialised capability and upfront investment that is not justified by commensurate financial returns.

Solutions

- Remove the requirement to use FullCAM under the hybrid approach, and adopt a measurement-based estimation approach instead
- Remove the 5t C/ha eligibility threshold. The LMS and the historical trend analysis over the baseline period provides sufficient confidence that the land would have been suppressed without the need for this arbitrary threshold.

Barrier 3. Forest cover attainment requirement

Situation

The draft requires regeneration to transition to forest cover within a defined timeframe.

Issue

Imposing a forest attainment test therefore excludes landscapes with slower ecological recovery. When combined, the effect of the forest cover attainment requirement, together with the 5 t/ha rule and 20-year non-forest baseline requirement could create a non-viable operating space for the method, as many landscapes capable of meeting forest thresholds within 15–20 years are the same areas likely to have exceeded forest cover at some point in the preceding two decades. The requirement also introduces significant back-ended relinquishment risk, as proponents may be required to remove CEAs and surrender ACCUs if forest cover is not achieved, even where measurable and verifiable carbon gains that are part of the national inventory have occurred. This creates late-stage risk that cannot be fully assessed at registration and raises equity concerns in cases of land transfer during the

crediting period. The risk is administrative in nature, creating perverse social tensions and misaligned incentives that do not fairly credit land managers for the outcomes they have achieved.

Solutions

- Remove the requirement to achieve forest cover during the crediting period where the measurement approach is used (note it may still be appropriate requirement for projects adopting FullCAM only abatement calculation due to model limitations). The existing gateway approach provides sufficient confidence that regeneration is progressing towards forest cover in line with Australia's national accounts, without needing a specified timeframe for progression

Barrier 4. Leakage requirements

Situation

The proposed leakage management regime expands whole-of-farm accounting obligations to all land parcels under management of business enterprise. The leakage approach focusses on displacement of clearing risk, which the Taskforce considers is appropriate. Historical clearing rates are not considered – any clearing occurring in the VAA above 5% is considered attributable to leakage.

Issue

The proposed leakage management regime expands whole-of-farm accounting obligations beyond areas of credible displacement risk. The requirement to stratify and assess vegetation condition outside CEAs increases monitoring and compliance costs and reduces operational flexibility to respond to drought, flood or fire. Detailed measurement obligations across non-carbon areas may also constrain future farm development, particularly for partially operational properties that would otherwise evolve over time. The breadth of these requirements is disproportionate to the demonstrated leakage risk and imposes administrative complexity without clear additional integrity benefit.

Solutions

- Consider whether recent EPBC Act reforms are sufficient to address leakage. If not:
- Adopt a targeted, event-triggered and materiality-based leakage framework focused on credible displacement risks rather than broad whole-farm accounting
- Leakage provisions should only be triggered if material clearing exceeds historical rates.
- The scope of the Vegetation Accounting Area should be limited based on risk, for

example to parts of the business enterprise within the same region or state, or only those States/Territories where clearing is permitted.

Q3. The exposure draft allows projects to transition from existing projects under the Carbon Credits (Carbon Farming Initiative – Reforestation by Environmental or Mallee Plantings – FullCAM) Methodology Determination 2024 and Carbon Credits (Carbon Farming Initiative – Native Forest from Managed Regrowth) Methodology Determination 2013 to the IFLM method where they meet the eligibility requirements. Are there considerations for transferring projects that have not been sufficiently addressed in the exposure draft for these projects? What additional transitional provisions are required to enable existing Human-Induced Regeneration (HIR) projects to transition to the IFLM method?

Issue. Transition mechanics

Situation

The exposure draft permits transition from EP method and the NFMR method to IFLM, but it does not yet provide sufficient structural certainty to enable confident uptake. The draft method does not contain any transition requirements for HIR projects.

Issue

Key elements of transition remain unclear, including whether baselines are carried forward or reset, whether the project has a new crediting period or how the existing crediting is transitioned, consent requirements, when new measurement obligations commence, and whether retrospective VAA or leakage assessments apply. Without these provisions, proponents face material legal and commercial uncertainty that may delay or prevent transition.

Solution

- Define transition as a formal entry state with clear rules covering baseline carry-forward or reset, crediting period, treatment of legacy data, commencement of new obligations, consent requirements and limits on retrospective application of new requirements.

Issue. Crediting period

Situation

Many IFLM transition projects will take on additional carbon farming commitments as part of the IFLM project, which could include: introduction of new activities, a commitment to sequester carbon in additional carbon pools, and/or application of different measurement/estimation processes. Projects that take on these new commitments should be considered a 'new' project under the ACCU Scheme.

Issue

Due to the higher measurement costs and additional method safeguards, providing the option to reset the crediting period will incentivise transition, by accessing the full 25 year ACCU benefits of the project. This also allows projects taking on new activities time to implement the new management change and deliver the project outcomes. A shorter crediting period will significantly impact the economics of transitioning and likely create a disincentive or barrier.

Solutions

- IFLM transition projects that take on a new activity or different measurement approach should be considered 'new' projects at the time of transition. They should have the option to take on a new crediting period and permanence period
- Include a newness in lieu requirement for transition projects, benchmarking newness back to the time of registration of the former project.

Issue: No forced transitions

Situation:

The DCCEEW progress report (2023 – 2025) noted that “the department is considering the circumstances under which existing projects should be required to transfer to new or varied methods.”⁸

Issue:

Projects transitioning to the IFLM method will likely take on different and expanded land management obligations. Some proponents may not be willing to take on such obligations which are fundamentally different. Forcing such transitions would reduce trust and threaten integrity of the scheme.

Forced transition to the IFLM method could also reduce certainty over abatement

forecasts. This would reduce land manager uptake of ACCU projects, and negatively impact investment certainty for commercial investors.

Solution:

- There should be no requirement for mandatory transition from standalone methods to the IFLM method. To ensure industry stability, proponents should have the option to stay on the method and model that existed at the time of project registration/transition.

Q4. Does the proposed method support rural and remote communities, including First Nations Australians, to participate in and benefit from the ACCU Scheme?

Issue. Native Title consents

Situation

It is unclear whether existing native title consents would carry over for transition projects.

The Department has yet to implement Recommendation 11 from the Independent ACCU Review in relation to consents on native title land, aligned with principles of Free, Prior and Informed Consent (FPIC).

It is unclear whether the reformed consent process would be a one-time upfront consent, or a series of consents (such as a two-step process) aligned with the Nature Repair Act.

Issue

Lack of clarity on whether existing native title consents carry over and/or when new consent is required makes it difficult to assess whether a project could or should transition.

To prepare for a potential influx of new and transition projects under IFLM, the reformed process for consents on native title land should be finalised as soon as possible

It is important that a reformed consent process provides a mechanism for appropriate free, prior, and informed engagement. A single step process is unlikely to achieve that, as risks forcing rushed discussions, while a process akin to the Nature Repair Act would help with alignment across the schemes where projects are undertaking both carbon and nature on one property.

Solutions

- Clarify consent continuity and triggers for new consent
- Implement a revised native title consent process that is aligned with the process in the Nature Repair Act legislation to enhance interoperability.

Issue: Viability in arid and semi-arid regions

Situation

Much of remote Australia, including large Indigenous estates, occurs in arid and semi-arid landscapes.

Issue

Commercial and technical barriers in the draft method significantly limit viability in these regions. Industry expectations are that regeneration projects would be unlikely to proceed in WA, SA and NT under the current settings.

Eligibility rules such as the hard <5 t/ha commencement threshold risk could exclude areas of the rangeland and Indigenous estate where the presence of scattered mature seed trees (which will not be measured as a carbon stock increase, but are needed to provide seedstock for the next cohort) could rule out an area with otherwise genuine long-term sequestration potential. Evidentiary requirements such as flat or declining cover tests may also be difficult to apply in data-sparse systems.

Solution

- Treat the 5 t/ha threshold as a safe harbour rather than a strict eligibility gate
- Adopt weight-of-evidence approach to eligibility assessment for suppression and recovery potential (rather than having binary yes or no compliance).

Issue. Soil carbon not included, limiting viability in intensive agricultural regions

Situation

Soil carbon is not included in the draft method.

Issue

Without soil, participation is reduced in priority regions in the more intensive agricultural zones of Australia. In particular, failure to include soil will limit commercial viability and participation on smaller land parcels due to the restricted focus of available land management activities. The exclusion of soil is poorly aligned with the Nature Repair Act, where boosting tree cover / biodiversity in the more intensively

managed agricultural zones is a high focus. Commercial viability thresholds are often higher in intensive agricultural zones due to the value of land, cost of practice changes and alternative options and size of properties. As a consequence, providing the maximum potential breadth of carbon management activities is typically needed for carbon farming to become a viable pathway for land managers in these regions.

Solution

- Accelerate the ERAC review of the soil carbon method; and include soil as a module in the first release of IFLM, mirroring the standalone soil method to the greatest extent possible.

Q5. What additional project information for publication could be required to section 93A of the CFI Rule ('Publication of relevant information') to improve transparency and provide confidence that IFLM projects are generating genuine abatement?

Situation:

We support strengthening publication requirements under section 93A to improve transparency and confidence that IFLM projects are generating genuine abatement. Transparency is central to maintaining public trust, supporting independent scrutiny and ensuring consistent interpretation of project performance.

In July 2025, the Clean Energy Regulator completed its implementation of data transparency recommendations from The Independent Review of ACCUs.⁹

Issue:

Phase 3 of the ACCU Scheme recommendations are yet to be designed or implemented. These include a commitment (i.e. Recommendation 4.2) to “explore using a national platform to share information and data about the ACCU scheme”. This key reform would enable sharing of data from carbon farming projects, while respecting privacy and intellectual property.

Further, Land Management Strategies typically contain significant personal information, creating interactions with Privacy Law. Additional release of public information should take this into account. One option could be to develop a pro forma summary template that is released as a ‘public’ version of a Land Management Strategy, while sensitive data is kept in a confidential version. Data infrastructure would assist in streamlining any further releases, so this should be considered in the context of ACCU Scheme reforms and implementation of the above review

recommendations, rather than on a method by method basis.

Solutions:

- Further requests for data transparency should be conducted on a whole-of-scheme basis, and not tied to an individual method.
- Detailed data releases should be conducted as part of a federally coordinated, decentralised environmental and land data sharing system, supported by a national data discovery portal and robust governance standards, including compliance with Privacy Law requirements.
- DCCEEW and the CER should establish a joint working group with stakeholder and expert participation to implement the remaining transparency recommendations from the Independent Review of ACCUs.

Q6. In October 2024, the Government prioritised the Queensland Department of Environment, Science, Tourism and Innovation to develop the 'Improved Avoided Clearing of Native Regrowth' method, which may include activities similar to those in the IFLM method. The department welcomes any feedback from stakeholders on how the two methods could usefully co-exist to maximise carbon abatement while continuing to meet the offsets integrity standards (OIS)

Situation

The Taskforce is a strong supporter of an avoided clearing method to address genuine risks of native vegetation loss in Australia.¹⁰ The IFLM Taskforce's initial blueprint for the IFLM method included avoided clearing as an eligible activity under the method.

The development of the Improved Avoided Clearing of Native Regrowth method presents a significant opportunity to maximise whole-of-farm abatement, provided it is designed to operate coherently alongside IFLM.

Issue: Duplication of integrated methods

The Queensland Government's proposal to develop a second integrated method in addition to the Government's priority IFLM method would create significant market confusion, duplicate effort and create administrative challenges for the scheme⁶.

Ultimately, we hope an improved version of the avoided clearing method could become

⁶ A majority of Taskforce members are supportive of having only one framework method, with a minority not supportive.

one of the first new IFLM method modules, in addition to its standalone implementation.

The latest consultation draft of the Queensland Government's proposal had many technical and operational elements that were not viable to implement on projects at scale, particularly in the regeneration activity components. The Taskforce view is that without reform those elements did not meet the requirements of the OIS. For these reasons, combined with the rationale above, we believe that the proponent led process should focus solely on the avoided clearing component, consistent with the original Expression of Interest.

Solution:

- IFLM should provide the sole integrated method framework for land sector activities.
- The avoided clearing method should be made as both a standalone method and a module of IFLM.

Issue: IFLM lacking architecture to accommodate avoided clearing

As currently drafted, IFLM remains architecture is focused on sequestration and does not yet provide the architectural readiness required for integrated avoidance and mitigation pathways. Emissions avoidance requires additional technical equations that cover emissions prevention rather than biomass accumulation. Without reform, the two methods may operate in parallel rather than as complementary components of a unified framework, creating duplication, stacking uncertainty and measurement complexity for proponents managing the same landscape. Typically clearing and regeneration happen side by side on the same properties, and hence integrating them will lead to greater uptake and enhance environmental outcomes.

To enable effective co-existence, IFLM should be structured around a clearly articulated whole-of-farm net-abatement equation within the core Determination, containing plug-in parameters to accommodate sequestration, avoided loss of sequestered carbon, and avoided emissions.

Solutions

- Include the architecture (i.e. equations, carbon pools) in the core method framework, to allow future addition of avoided loss of sequestered carbon, and avoided emissions modules.
- Include an avoided clearing module that mirrors the standalone avoided clearing method, once the proponent-led method development process by the Queensland

Government is complete.

Issue: Treatment of leakage

Consistent treatment of leakage, Land Management Strategy requirements and accounting adjustments across different methods and modules is essential. Avoided clearing and sequestration activities may interact at the property scale through baseline settings, management decisions and displacement risks. Divergent leakage frameworks or inconsistent accounting treatments would increase compliance burden and reduce transparency.

Solution

- Harmonise the leakage assessment and monitoring processes between IFLM and the avoided clearing method.

Q7. Are the current restricted activities appropriate (see Part 3, Division 6 of the exposure draft)? Are additional restrictions required or are any restrictions no longer required

Situation

Activities such as planned fire, thinning, pruning, limited infill planting and landscape rehydration are often necessary to manage risk, respond to seasonal variability, and support ecological recovery in suppressed systems.

Issue

Where these tools are broadly restricted rather than clearly regulated, the method risks creating impractical project settings that do not reflect how landscapes are managed on the ground.

Overly prescriptive prohibitions may undermine participation and create unnecessary tension with landholders and Traditional Owners, especially where such activities are integral to culturally and ecologically appropriate management.

Solution

- The method should permit reasonable management actions such as thinning (in line with clear regulatory guidance), where their carbon impacts can be measured and transparently accounted for.

Clearing in the 7/5 years prior to project registration

Situation

Interpretation of paragraph 20AA(1)(e) has shifted away from its original purpose under Regulation 3.36 of the CFI Regulations (2011).

Issue

The current reading may unintentionally exclude high-additionality avoided re-clearing projects, undermining participation in projects that deliver strong climate and biodiversity benefits.

Solutions

- Clarifying Section 20AA of the CFI Rule to reflect its original intent - preventing clearing of intact, high-carbon native forests, rather than excluding projects that have undertaken minor re-clearing within the past five to seven years.
- In drafting the IANCR method, we understand from consultation briefings that the Queensland Government was advised that paragraph 20AA does not apply to avoided clearing projects. We request that this advice be made public and clarified for both the IANCR and IFLM methods.

Q8. The scientific literature suggests that grazing by herbivores (livestock and wildlife) may affect carbon stock accumulation in woody vegetation, but the impacts of grazing can be difficult to distinguish from the influence of rainfall variability and other factors. As a result, growth in woody vegetation cannot easily be attributed to changes in management practices. A suite of method settings is proposed that are intended to ensure credited abatement is additional and can be attributed to the project activities undertaken.

a. Is the range of method settings sufficient to ensure that any measured changes in woody vegetation are correctly attributed to changes in management practices?

b. If not, how might the scientific rigour and overall integrity of removal of grazing as a suppressant with respect to regeneration of woody vegetation be improved?

c. Will the range of method settings provide a conservative estimate of abatement?

Situation

Grazing has material impacts on woody vegetation carbon stocks (see Appendix 1 for a

full literature review). In rangeland systems, economic pressures create a well-documented cycle of ecosystem decline: when seasonal conditions deteriorate, pastoralists face strong financial incentives to maintain stocking rates beyond what the landscape can support. Over time, this depletes preferred fodder species and forces livestock onto saplings, shrubs and mature trees. Feral and native herbivores compound this pressure.

The consequences are cumulative and persistent. Sustained grazing pressure prevents new tree and shrub cohorts from establishing, creating discernible gaps in age-class structure and driving the gradual loss of mature trees to senescence (Ludwig & Tongway, 2024). The result is widespread carbon stock deficits compared to ungrazed or remnant ecosystems, representing a material sequestration opportunity (Dean et al., 2015).

Many of these landscapes have been suppressed since colonial-era tenure conditions mandated clearing as a requirement of title. They have never been detected as "forest" or "cleared" in satellite imagery, which is effectively blind to the 150 years of pastoralism that preceded the 1980s.

Taskforce Position

We support the principle of using multiple lines of evidence to attribute changes in woody carbon stocks to project activities. The strongest case for attribution requires shifting the focus from proving a single causal link to demonstrating how project activities alter the system of relationships that drive vegetation outcomes.

Specifically, we support:

- [The Land Management Strategy \(LMS\) as the primary mechanism for verifying how suppressors have prevented regeneration and how they will be addressed by the project activity.](#)
- [Ecological evidence such as missing age cohorts, limited ground cover, or soil degradation to describe the long-term impact of suppressors including grazing.](#)
- [A flat or declining baseline vegetation condition, combined with proactive elimination of alternative explanations for woody biomass recovery \(e.g. response to fire\).](#)
- [A gateway system based on change in canopy cover, rather than static thresholds.](#)

Taken together, these lines of evidence substantiate the additionality of woody regeneration, confirming that recovery is contingent upon human intervention.

Issue. The non-forest cover requirement is too restrictive.

Requiring land to have had no forest cover for the full 20-year baseline period excludes areas with genuine sequestration potential. The 20-year window remains useful for observing trends in vegetation condition, but should not function as an eligibility barrier.

Solution:

- Shorten the non-forest cover eligibility requirement to seven years prior to registration, while retaining the 20-year period for trend analysis.

Issue. The 5 tDM threshold should not apply to measurement-based approaches.

This threshold reflects assumptions embedded in FullCAM-only modelling and is inappropriate where projects use direct measurement. It risks excluding areas where suppression has maintained biomass just above an arbitrary level, despite clear evidence of degraded condition.

Solution:

- Remove the 5 tDM threshold for projects using measurement-based approaches (see Q13).

Issue. Trend analysis and biomass thresholds alone cannot establish attribution.

Grazing often causes long-term structural suppression of woody vegetation, including missing recruitment cohorts and persistent carbon stock deficits relative to ungrazed systems. These effects frequently predate satellite monitoring and may not appear as a recent detectable decline. Requiring a flat or declining baseline as proof of suppression will systematically exclude landscapes where the damage occurred decades ago and has simply persisted.

Issue. Evidence requirements should not function as a binary pass/fail.

The current checklist approach risks rejecting projects where the overall case for attribution is strong, simply because one category of evidence is unavailable.

Solution:

- Adopt a weight-of-evidence approach that evaluates the overall strength of the attribution case, drawing on ecological, historical and mechanistic lines of evidence rather than treating any single indicator as a mandatory gate.

Q9. A discount when issuing ACCUs is proposed to account for uncertainty in the attribution of regeneration of woody vegetation to the project activity. Different discount rates have been proposed for lower and higher rainfall areas, to reflect variable forest responses to rainfall and associated attribution uncertainty in these landscapes.

a. Is a 500mm average annual rainfall threshold an appropriate proxy for regions with higher and lower uncertainty of attribution? Should rainfall frequency, as well as average annual rainfall, be usefully incorporated into the method's settings and if so, how?

b. Would other proxies, such as vegetation type or ecosystems, more accurately account for variation in the growth rate of woody vegetation?

Attribution discount

Situation

The stated purpose of the attribution discount is to avoid crediting natural fluctuations.

This framing rests on a misunderstanding of woody vegetation dynamics. Regeneration and dieback may occur across multi-year wet-dry cycles, including drought. But it is precisely the survival of regeneration when conditions deteriorate that requires careful management of grazing pressure. This is the core of what projects do, and what the attribution framework should recognise.

While Australian rangelands experience seasonal variation in rainfall, the variability in remotely sensed photosynthetic material (i.e. a "green flush" after rain) is not a reliable indicator of change in woody carbon stocks (see Appendix 1). Overreliance on satellite-based products lead to the incorrect conclusion that there are large fluctuations in woody carbon stocks.

Field measurements and high-resolution monitoring show that the establishment of woody vegetation occurs over multiple decades, requiring the persistence and slow but steady growth of regenerating trees and shrubs even through dry periods.

Issue. Attribution is already handled through the eligibility assessment.

The Land Management Strategy establishes that suppression has prevented regeneration and that project activities will address it. Combined with baseline evidence and elimination of alternative explanations, the case for attribution is built before crediting begins. Applying a discount at issuance layers additional conservatism onto a risk that has already been assessed.

Issue. Withholding credits based on canopy cover thresholds manages forest attainment risk, not attribution risk.

Progression gateways already remove areas where change is not occurring. Land that fails to show increasing woody biomass is removed from crediting. These are distinct concerns and should be treated as such. An additional discount on top is redundant.

Issue. The discount is greatest where the risk is smallest.

Low rainfall systems respond slowly to any driver, including rainfall. Regeneration takes years before contributing material sequestration. Variable, high rainfall systems grow faster but lose more during drought. The discount is heaviest in landscapes where short-term rainfall-driven fluctuations in woody biomass are smallest.

Issue. Measured change above baseline is the strongest form of attribution.

Where a project demonstrates persistent increases in woody carbon stocks above a flat or declining baseline, credits reflect sequestration that has actually occurred. Rainfall-based proxies and canopy cover thresholds do not improve on this. The concern about variation in growth rates is avoided entirely by using a measurement-based approach (see Q13)

Solutions

- Remove the attribution discount. Attribution is established at eligibility through the LMS and supporting evidence, and tested through progression gateways.
- Adopt a measurement-based approach to abatement estimation, removing the need for rainfall-based proxies (see Q13).
- Where further assurance is sought, require ongoing monitoring of ecological indicators used at registration, such as infill of missing age cohorts, return of grazing-sensitive species, or improvements in soil condition.

Q10. The exposure draft includes an approach (the hurdle requirement) to manage possible leakage resulting from a project (see Part 4, Divisions 4 and 5 of the exposure draft). This refers to the risk that project activities may drive changes in agricultural activities outside of the Carbon Estimation Areas (CEAs), potentially including increased clearing or greater grazing intensity outside the CEAs.

a. Are the proposed requirements appropriate to manage the risk of leakage and minimise the transaction burden for projects?

b. Are there other project emissions beyond a change in carbon stock that should be accounted for outside the project area, as they are also likely to be a result of leakage (rather than business as usual land management practices)?

c. Should additional discounts apply to account for the risk of leakage?

Issue. Interaction with the EPBC Act

Situation

The recently reformed EPBC Act prevents clearing on many categories of vegetated land.

Issue

It is likely that the newly revised EPBC Act provides sufficient protection against displacement of clearing activities, without the need for a specific leakage management approach in the method.

Solution

- Conduct a review of the EPBC Act, and assess whether it provides sufficient safeguards against leakage.

Issue. Vegetation Accounting Areas

Situation

The draft introduces Vegetation Accounting Areas (VAAs) and a whole-of-enterprise construct to manage leakage risk. It correctly identified the primary leakage risk as displacement of clearing. Leakage is identified as any clearing above 5%, irrespective of historical clearing rates.

Issue

The drafting creates an onerous compliance obligation across all land owned by the business enterprise, rather than a targeted safeguard. This may reduce option value of other land owned by the enterprise, which will reduce participation. Failure to take account of historical clearing rates will incorrectly assume 'business as usual' clearing are leakage.

Solution

- Leakage controls should be event-triggered and materiality-based, activated only

where clearing exceeds defined business-as-usual baselines and can be causally linked to project activities.

Q11. The exposure draft includes an approach where areas not stratified as CEAs or exclusion areas must be stratified as Vegetation Accounting Areas (VAAs) for applying the hurdle requirement (Division 4, section 15 and 16). It is intended an exclusion area is an area without vegetation and where vegetation will not grow (i.e. waterways, infrastructure, rocky outcrops or roads). It is proposed the CFI Mapping Guidelines will be updated in line with this– if required.

a. What issues might arise if the CFI Mapping Guidelines were updated to reflect only these areas that can be mapped as exclusion areas?

Issue. Inconsistency with existing methods

Situation

The proposal defines exclusion areas as land without vegetation and where vegetation will not grow.

Issue

A universal definition limiting exclusion areas to land “without vegetation and where vegetation will not grow” would create transitional risks, due to inconsistency with previous methods. Areas previously classified as exclusion areas may be forced into Vegetation Accounting Areas (VAAs), thereby expanding whole-of-farm accounting obligations beyond what proponents anticipated at registration. For example, infrastructure areas such as tracks, yards and maintained firebreaks are commonly treated as exclusion areas, and clearing in these areas should not be considered leakage.

Solution

- Exclusion areas should remain method-specific and functionally defined rather than restricted to areas without vegetation.

Q12. What are the benefits and risks if landscape rehydration were to be included as an eligible management activity in the ‘suppressed land’ module?

a. Are restrictions required to ensure hydrological management does not lead to

leakage or adverse impacts on broader landscape hydrology?

b. Are any of these concerns managed through existing regulatory requirements?

Issue. Biophysical impacts

Situation

In many suppressed ecosystems, altered hydrology, soil compaction and erosion limit regeneration even where grazing pressure is reduced. Benefits include improved soil moisture retention, stabilised groundcover, and recruitment and survival of woody vegetation.

Issue

There are risks related to unintended downstream impacts, altered water availability, or ecosystem shifts.

Solution

- The method should allow landscape rehydration where it restores natural flow regimes, improves soil moisture retention and supports regeneration.
- Require transparent documentation of hydrological interventions in the Land Management Strategy.
- Prepare guidelines to manage risks associated with landscape rehydration.

Issue. Regulatory considerations

Situation

In most jurisdictions, water management activities are already regulated under state and territory water legislation, environmental planning frameworks and catchment management rules. These regimes typically require approvals for works affecting watercourses, surface flow or groundwater systems and include safeguards against adverse downstream impacts.

Issue

Much of the hydrological risk is already addressed outside the carbon method. Duplicating these controls within the method would add regulatory burden without improving environmental outcomes.

Solution

- The method should require compliance with existing regulatory requirements rather than duplicating environmental controls.

Q13. The exposure draft proposes a new measurement approach that combines the use of FullCAM with local measurements derived from deploying remote sensing technologies (the FullCAM-Measure Hybrid approach). The FullCAM-Measure Hybrid approach proposes that measurements are taken at 5-yearly intervals for carbon stock and canopy projection cover –the intent being that this enables more accurate calibration of the Tree Yield Formula.

a. From a scientific or project implementation perspective, are there any technical considerations that suggest the proposed approach for the FullCAM-Measure Hybrid approach should be adjusted?

b. Are disturbance events appropriately accounted for in the proposed approach?

c. The method includes a 40% Tree Yield Formula discount to manage the uncertainty associated with the FullCAM-Measure Hybrid approach, which would be returned if the project's abatement is demonstrably achieved in year 25. Does the proposed approach to use the Tree Yield Formula discount conservatively address uncertainties in sampling and calibration?

d. Do you foresee situations when proponents may switch between spatially referenced / spatially explicit sampling approaches between reporting periods? How can this be facilitated while maintaining the integrity of the sampling approach?

e. Should the method allow projects to be credited based on direct sampling of biomass without the use of the Tree Yield Formula. For example, using multi-phase sampling and validated maps that are trained using LiDAR?

f. Could the method be improved by allowing other project activities to use the FullCAM-Measure Hybrid approach?

Situation

The exposure draft this approach inherits the structural limitations of FullCAM, such as the shape of the growth curve, which have attracted criticism when applied to natural regeneration settings. More fundamentally, it fails to capture the core advantage of measurement. Rather than letting the data speak for itself, the method benchmarks

observations against the Tree Yield Formula, effectively subordinating measured reality to a model.

The root of the problem is the decision to retain forward-looking forecasts. There appears to be an assumption that crediting requires a growth model to project future carbon stocks. It does not. If instead credits are issued on measured outcomes, the growth curve becomes unnecessary, and with it the elaborate discounting regime designed to manage the uncertainty of the curve's fit. If there is doubt about whether a growth model suits the application domain, the simplest solution is to remove the model and credit what has been measured.

Forecasting can be important as part of project due diligence and investment or consent decisions, but this is not a regulatory issue. As such, this capability does not need to be addressed in the method and guidance on robust forecasting approaches could be provided outside of the legislative determination, including potentially via the voluntary Code of Conduct.

Taskforce Position

We strongly support a measurement approach based on multi-phase sampling, consistent with the spatially explicit pathway already in the draft method and analogous to Schedule 2 of the 2021 Soil Carbon Method.

Under this approach, spatially explicit biomass maps are generated for every pixel across the landscape, informed by remote sensing, environmental data layers and reference biomass data. Biomass maps are validated using a combination of airborne LiDAR, terrestrial laser scanning or plot-based inventories, and applying locally validated allometries. Carbon stocks for each CEA are derived from these maps by summing all pixels within the CEA boundary. At regular intervals, maps are updated and revalidated, with measurement effort shared across validation groups of comparable CEAs. Credits are issued based on observed change, discounted by probability of exceedance: the difference between two time points must be large enough, given quantified uncertainty, that the likelihood of a genuine increase exceeds a defined confidence threshold. Losses or years of no growth are reported and handled through project net accounting.

This is an observe-then-credit model, not a forecast-then-reconcile model. No forward projection means no accumulating reconciliation risk, no lump-sum withholding, and no 25-year delay before credits are fully realised.

This approach credits changes in above-ground biomass, below-ground biomass, and debris: the same pools under Australia's Paris Agreement commitments. Multi-phase

sampling produces spatially explicit, pixel-level estimates, structurally closer to how the National Inventory works than either FullCAM approach, both of which reduce an entire CEA to a single modelling point. Using different methods for the same carbon pools is not unprecedented: the National Inventory itself uses a linear growth model rather than FullCAM for sparse woody vegetation.

Issue: Projects investing in high-quality data still have their abatement determined by a model.

The hybrid approach uses measurements to recalibrate FullCAM rather than to directly estimate carbon stock change. The default curve is used for the first 10 years, but issued at a reduced rate, regardless of measurement outcomes.

Solution:

- Adopt multi-phase sampling as the primary measurement pathway, using direct estimation of carbon stock change rather than model calibration.

Issue. The 40% TYF discount is commercially unviable.

A credit unrealisable for 25 years will have near-zero present value and may be unmarketable due to vintage. The withholding of credits is at odds with the higher confidence measurement delivers. This undermines the economic incentive that is the fundamental rationale for carbon crediting.

Solution:

- Replace the TYF discount with probability of exceedance, providing continuous, proportionate discounting based on quantified uncertainty at each reporting interval. Risk is addressed as it arises rather than allowed to accumulate.

Issue. The 5 tDM threshold and forest attainment criteria are guardrails for the FullCAM model.

These guardrails reflect FullCAM assumptions about starting and ending conditions, but do not themselves define eligible carbon stock change. Under a measurement approach, starting biomass is observed directly. A site that meets the eligibility requirements related to suppression and land management change, and post project implementation grows from 6 to 20 tDM/ha represents genuine sequestration regardless of where it sits relative to a model-derived threshold.

Solution:

- Remove the 5 tDM eligibility threshold and forest attainment criteria for measurement-based projects.

Issue. Prescriptive sampling rules constrain innovation.

The draft codifies specific plot sizes, processing algorithms, and tools in the legislative instrument. This prevents rapid adoption of technologies which offer equal or better accuracy with superior efficiency.

Solution:

- Set performance outcomes in the legislation (minimum statistical precision and sampling intensity relative to spatial variance). Move technology-specific requirements to subordinate guidelines.

Issue. Technology changes must not create artificial stock change.

Switching measurement approaches between reporting periods can introduce methodological drift, creating apparent changes that do not reflect genuine carbon dynamics.

Solution:

- Require any change in measurement technology to trigger recalculation of historical abatement estimates.

Issue. Re-stratification after disturbance is unnecessary under a measurement approach.

The draft proposes re-stratification when disturbance events occur. This adds administrative complexity to handle something that measurement captures automatically. If carbon stocks are measured directly at regular intervals, the impact of any disturbance is already reflected in the next measurement and reported through project net accounting.

Solution:

- Allow direct measurement to capture disturbance impacts as part of routine reporting.

Issue. Measurement should be available across all project activities.

Requiring high-fidelity measurement for one module while restricting others to a different framework creates unnecessary complexity and cost on properties managing

a mosaic of land types. Environmental Planting projects, generally regarded as high integrity, are often penalised by conservative FullCAM parameterisation. A single monitoring campaign, such as a property-wide LiDAR acquisition, should be able to quantify abatement across all activities.

Solution:

- Allow measurement-based approaches across all woody biomass activities, enabling a unified monitoring framework for the whole property.

Q14. The exposure draft requires a qualified person to assess the land management strategy. Do the proposed requirements defining a qualified person (see sub-section 22(9)) strengthen confidence the project eligibility requirements are being met and manage risk of insufficient available qualified persons? Is the qualified person definition sufficiently broad to capture First Nations knowledge holders?

Situation

We support a competency-based qualified person requirement for assessing the Land Management Strategy. Eligibility, suppression and additionality assessments require ecological judgement and causal reasoning, and consistent application of these tests strengthens integrity.

Issue. An overly narrow definition will create bottlenecks without improving integrity.

If the definition is too prescriptive, it risks insufficient availability of qualified persons in remote regions, increased cost and delays, and uncertainty about whether suitably qualified internal professionals may fulfil the role where conflicts are managed.

Issue. The definition must not exclude First Nations expertise.

Western credential systems risk excluding Indigenous ecological and land management knowledge that is directly relevant to assessing landscape condition, suppression history and management change. The Independent Review of ACCUs emphasised the need for stronger First Nations participation and culturally appropriate governance within the scheme. Excluding this expertise would weaken both technical integrity and social legitimacy.

Solutions

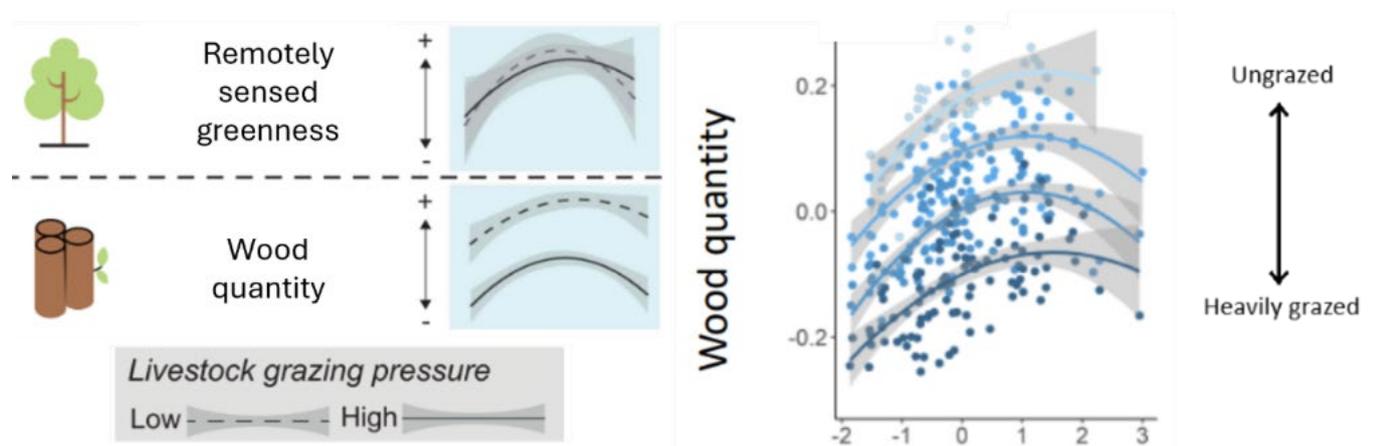
- Keep the definition competency-based rather than prescriptive, and delegate specific requirements to guidelines.
- Allow multidisciplinary or team-based approaches to the assessment.
- Explicitly recognise First Nations knowledge holders and culturally informed land management expertise within the qualified person framework.
- Align LMS review obligations to material triggers (management change, major disturbance, new CEAs, significant re-stratification) rather than fixed intervals.

Appendix 1

Summary

There is substantial evidence of grazing impacting the recruitment, growth and survival of arid & semi- arid trees species, which have demographic processes that span multiple wet/dry cycles (see excerpts & references below).

Sustained pressure on woody vegetation has two critical impacts: it prevents the survival and growth of new cohorts of trees and shrubs, while also contributing to the gradual loss of mature trees through senescence. Over decades, this results in systematic changes to vegetation structure, particularly the loss of mid-sized trees indicating failed recruitment.



Recent, high impact papers have studied the impact of grazing on woody vegetation and its restoration, globally. Herbivory had strong negative effects on restoration of woody vegetation through natural regeneration in all terrestrial biomes (Xu et al., 2023). For Australian rangelands specifically, there is clear evidence to demonstrate that grazing pressure can reduce carbon storage and increase erosion (Maestre et al., 2022), but that this difference is masked in remotely sensed proxies of greenness (e.g. NDVI).

Ecological mechanisms

When seasonal conditions deteriorate, pastoralists face a financial imperative to maintain higher stocking rates than the landscape can support (Stafford-Smith et al., 2000; 2007). Selling stock when everyone else is selling drives prices down, while supplementary feed costs rise. The rational economic response is to retain stock and deplete existing pastures. As preferred fodder species are exhausted, livestock turn to less palatable vegetation, including saplings, shrubs and mature trees. Feral and native animals compound this pressure, particularly after periods of sustained population growth.

Over decades, this sustained grazing pressure curtails the survival and growth of new tree and shrub cohorts. The result is a discernible gap in mixed age-class trees, the systematic loss of mature trees to senescence, and degraded organic matter cycling and water infiltration (Ludwig & Tongway, 2024). The cumulative effect is widespread, persistent carbon stock deficits

compared to ungrazed or remnant ecosystems, representing a material sequestration opportunity (Dean et al., 2015).

It is also important to recognise the historical context. Early land grants and subsequent tenure systems frequently mandated clearing of native vegetation as a condition of title. Government policies and financial incentives reinforced this, encouraging destruction of timber and scrub as "improvements." Many of these areas have never fully regenerated, yet they have never been detected as "forest" or "cleared" in satellite imagery, which is effectively blind to the 150 years of pastoralism that preceded the 1980s.

Further, the impact of herbivory on regeneration of woody rangelands species has been well documented in the Australian ecological literature:

Why linear causal analysis is insufficient

A common misconception is that increased woody growth during wet periods, followed by apparent decline in dry times, demonstrates that rainfall directly controls vegetation dynamics. While a linear relationship between rainfall and biomass may hold for grasses (Pickup et al., 1996), the presence of mature trees in arid regions with highly variable rainfall provides clear evidence that simple rainfall-response relationships cannot explain long-term woody vegetation dynamics.

Remotely sensed datasets such as Woody Cover Fraction, NDVI, and Persistent Green often show rapidly fluctuating signals that reflect changes in photosynthetic material (grass and leaves) rather than actual changes in woody biomass. Field measurements and high-resolution monitoring show that woody vegetation persists and continues slow but steady growth even through dry periods. Comparison of Woody Cover Fraction with reference LiDAR across semi-arid rangeland sites confirms systematic underestimation of woody biomass by satellite-derived products.

Since annual rainfall patterns oscillate between wet and dry periods and revert to the mean over the long term, with no net trend in wetting or drying historically or in projections (McKeon et al., 2021), sustained changes in woody vegetation condition cannot be explained by rainfall alone.

Selected excerpts from the literature.

“Sheep are highly selective herbivores, capable of reducing regeneration even at very low stocking rates in some woody plant species (e.g. *Acacia aneura*) but not others (e.g. *Eremophila sturtii*; Harrington 1979).”

“Rabbits ringbark trees and shrubs and consume seedlings (Dixon 1892).”

“Goats are browsers rather than grazers, are able to subsist on a woodier diet than sheep, and a

re known to eat seedlings, peel bark and even climb trees to reach canopy leaves (Wilson, Mulham & Leigh 1976; Harrington 1979).”

Tiver and Andrew, 1997

“.. in the arid zone, size distributions of many long-lived plant species are heavily skewed, with few or no juvenile or young adult plants present because new recruits do not persist under the current grazing regime. (Auld and Keith, 2009).”

Prior et al., 2011.

“The effects of even a few failed recruitment events arising from even a single overgrazing event can persist for over a century (Tiver and Andrew, 1997)”

“When it removes seedlings and young adults (saplings), grazing can have disproportionately large effects on population structure...”

“Our data provide strong evidence that recent grazing by livestock and rabbits can reduce sapling density and alter woody plant occurrence. This has the potential to induce long-term changes in ecosystem structure by limiting shrub and sapling establishment which could lead to aging and contracting woody plant populations.”

“Establishing and maintaining livestock-free areas and managing or eliminating feral animal populations, particularly in low rainfall years, will be required to support successful recruitment events (Tiver and Andrew, 1997).”

Travers et al 2019,

“Browsing by cattle (*Bos taurus*), sheep (*Ovis aries*) and rabbits (*Oryctolagus cuniculus*) reduce recruitment of many Australian arid zone shrubs and trees (Lange and Graham 1983; Foran et al. 1985; Foran 1986; Auld 1990, 1993, 1995b; Woodell 1990; Noble 1997; Landsberg et al. 2002; Denham and Auld 2004). Rabbits alone can prevent regeneration of some arid zone shrub species (Hall et al. 1964; Lange and Graham 1983; Auld 1995a), causing population declines or local plant extinctions (Crisp 1978; Silander 1983).”

Munro et al, 2009

“Rainfall pulses alone do not guarantee successful recruitment, seed availability and viability together with conditions suitable for germination (e.g. suitable seedbed, low competition) and su

Subsequent establishment also play an important role in regeneration success.”

“The total browsing pressure within Victorian Mallee semi- arid woodlands over the last two centuries has resulted in the virtual absence of tree regeneration (Cheal, 1993; Sandell, 2002). In many semi- arid woodland communities, regeneration failure of tree species has resulted in altered plant communities with shifted age class distributions with a bias towards mature and senescent individuals (Crisp & Lange, 1976; Lange & Willcocks, 1980; Milton, 1994; Milton et al., 1994; Cheal et al., 2007).”

Kenny & Moxham, 2022

“Stocking rates can be expected both to have a major effect on mulga growth and to vary quite widely in response to both economic and seasonal factors. Even under constant numbers of livestock per unit area, the effective grazing pressure can vary greatly between years because rangeland fodder production varies so much.”

“Even the lightest grazing arrested mulga growth and prevented the transition from low mulga to the taller forms used for drought feeding.”

“... seedlings need at least 12 to 20 years to develop into umbrella mulga. Given dry spells and some grazing, the time required would be substantially longer, No data on the frequency and intensity of felling of mulga for drought fodder has been published but observations in the Charleville district suggest that it is used during 3 or 4 years of each decade and that 15% to 30% of the available trees are likely to be felled in each of those years. At these rates and without replacement, umbrella mulga would be exhausted in 8 to 22 years.”

Brown 1985.

“Grazing-mediated suppression of the growth and/or recruitment of these species could lead to regional-scale loss of replacement cohorts for overstory and midstory plant species, leading to ecosystem-level changes and potentially reducing the resilience of these systems to other stressors such as climate change (Guerin et al., 2013).”

Prowse et al, 2019

“Grazing prevents recruitment [of *Acacia aneura*], causing its populations to decline. Recruitment resumes after release from grazing but requires exceptional climatic sequences.”

Crisp, 1978

“We found strong support for the central role of prolonged large rainfall events for regeneration in a long-lived arid tree, but our study also emphasised how rare regeneration opportunities can be negatively impacted by cattle browsing or fire at critical life history stages.”

Nano et al, 2012

References

Auld, T. (1995). The impact of herbivores on regeneration in four trees from arid Australia. *The Rangeland Journal*, 17(2), 213. <https://doi.org/10.1071/rj9950213>

Auld, T. D. (1990). Regeneration in populations of the arid zone plants *Acacia carnei* and *A. oswaldii*. *Proceedings of the Ecological Society of Australia*, 16, 267–272.

Auld, T. D. (1993). The impact of grazing on regeneration of the shrub *Acacia carnei* in Arid Australia. *Biological Conservation*, 65(2), 165–176. [https://doi.org/10.1016/0006-3207\(93\)90446-8](https://doi.org/10.1016/0006-3207(93)90446-8)

Auld, T. D. (1995). Seedling survival under grazing in the arid perennial *Acacia oswaldii*. *Biological Conservation*, 72(1), 27–32. [https://doi.org/10.1016/0006-3207\(94\)00059-y](https://doi.org/10.1016/0006-3207(94)00059-y)

Auld, T. D., & Keith, D. A. (2009). Dealing with threats: Integrating science and management. *Ecological Management & Restoration*, 10(s1). <https://doi.org/10.1111/j.1442-8903.2009.00447.x>

Brown, R. (1985). The growth and survival of young Mulga (*Acacia aneura* F. Muell) trees under different levels of grazing. *The Rangeland Journal*, 7(2), 143. <https://doi.org/10.1071/rj9850143>

Cheal, D. C. (1993). Effects of stock grazing on the plants of semi-arid woodlands and grasslands. *Proceedings. Royal Society of Victoria*, 105(1), 57–65.

Chesterfield, C., & Parsons, R. (1985). Regeneration of three tree species in arid south-eastern Australia. *Australian Journal of Botany*, 33(6), 715. <https://doi.org/10.1071/bt9850715>

Crisp, M. D., & Lange, R. T. (1976). Age Structure, Distribution and Survival under Grazing of the Arid-Zone Shrub *Acacia burkittii*. *Oikos*, 27(1), 86. <https://doi.org/10.2307/3543436>

Crisp, M. D. (1978). Demography and survival under grazing of three Australian semi-desert shrubs. *Oikos*, 30(3), 520. <https://doi.org/10.2307/3543347>

Dean, C., Kirkpatrick, J. B., Harper, R. J., & Eldridge, D. J. (2015). Optimising carbon

sequestration in arid and semiarid rangelands. *Ecological Engineering*, 74, 148–163. <https://doi.org/10.1016/j.ecoleng.2014.09.125>

Denham, A. J., & Auld, T. D. (2004). Survival and recruitment of seedlings and suckers of trees and shrubs of the Australian arid zone following habitat management and the outbreak of Rabbit Calicivirus Disease (RCD). *Austral Ecology*, 29(5), 585–599. <https://doi.org/10.1111/j.1442-9993.2004.01393.x>

Dixon, S. (1892). The effects of settlement and pastoral occupation in Australia upon the indigenous vegetation. *Proceedings of the Royal Society of South Australia*, 15, 195–206.

Foran, B., Low, W., & Strong, B. (1985). The response of rabbit populations and vegetation to rabbit control on a calcareous shrubby grassland in central Australia. *Wildlife Research*, 12(2), 237. <https://doi.org/10.1071/wr9850237>

Guerin, G. R., Biffin, E., & Lowe, A. J. (2013). Spatial modelling of species turnover identifies climate ecotones, climate change tipping points and vulnerable taxonomic groups. *Ecography*, 36(10), 1086–1096. <https://doi.org/10.1111/j.1600-0587.2013.00215.x>

Hall, E., Specht, R., & Eardley, C. (1964). Regeneration of the vegetation on Koonamore vegetation Reserve, 1926–1962. *Australian Journal of Botany*, 12(2), 205. <https://doi.org/10.1071/bt9640205>

Harrington, G. (1979). The effects of feral goats and sheep on the shrub populations in a semi-arid woodland. *The Rangeland Journal*, 1(4), 334. <https://doi.org/10.1071/rj9790334>

Kenny, S. A., & Moxham, C. (2022). Does above-average rainfall stimulate a recruitment pulse in semi-arid woodlands of southeastern Australia? *Journal of Vegetation Science*, 33(5). <https://doi.org/10.1111/jvs.13148>

Landsberg, J., James, C. D., Maconochie, J., Nicholls, A. O., Stol, J., & Tynan, R. (2002). Scale-related effects of grazing on native plant communities in an arid rangeland region of South Australia. *Journal of Applied Ecology*, 39(3), 427–444. <https://doi.org/10.1046/j.1365-2664.2002.00719.x>

Lange, R. T., & Graham, C. R. (1983). Rabbits and the failure of regeneration in Australian arid zone Acacia. *Australian Journal of Ecology*, 8(4), 377–381. <https://doi.org/10.1111/j.1442-9993.1983.tb01334.x>

Lange, R. T., & Willcocks, M. C. (1980). Experiments on the capacity of present sheep flocks to extinguish some tree populations of the South Australian arid zone. *Journal of Arid Environments*, 3(3), 223–229. [https://doi.org/10.1016/s0140-1963\(18\)31650-1](https://doi.org/10.1016/s0140-1963(18)31650-1)

Ludwig, J. A., Tongway, D. J., & Hindley, N. (2024). Can simple, on-ground vegetation and soil measures reliably indicate the health of rangelands? An application in Australia's semi-arid

woodlands. *The Rangeland Journal*, 45(6), 235–245. <https://doi.org/10.1071/rj24004>

Maestre, F. T., Le Bagousse-Pinguet, Y., Delgado-Baquerizo, M., Eldridge, D. J., Saiz, H., Berdugo, M., Gozalo, B., Ochoa, V., Guirado, E., García-Gómez, M., Valencia, E., Gaitán, J. J., Asensio, S., Mendoza, B. J., Plaza, C., Díaz-Martínez, P., Rey, A., Hu, H.-W., He, J.-Z., ... Gross, N. (2022). Grazing and ecosystem service delivery in global drylands. *Science*, 378(6622), 915–920. <https://doi.org/10.1126/science.abq4062>

McKeon, G., Stone, G., Ahrens, D., Carter, J., Cobon, D., Irvine, S., & Syktus, J. (2021). Queensland's multi-year Wet and Dry periods: Implications for grazing enterprises and pasture resources. *The Rangeland Journal*, 43(3), 121–142. <https://doi.org/10.1071/rj20089>

Milton, S. J. (1994). Growth, flowering and recruitment of shrubs in grazed and in protected rangeland in the arid Karoo, South Africa. *Vegetatio*, 111(1), 17–27. <https://doi.org/10.1007/bf00045574>

Milton, S. J., & Siegfried, W. R. (1994). A conceptual model of Arid Rangeland degradation. *BioScience*, 44(2), 70–76. <https://doi.org/10.2307/1312204>

Munro, N. T., Moseby, K. E., & Read, J. L. (2009). The effects of browsing by feral and re-introduced native herbivores on seedling survivorship in the Australian rangelands. *The Rangeland Journal*, 31(4), 417. <https://doi.org/10.1071/rj08027>

Noble, J. (1998). *Delicate and noxious scrub*. <https://doi.org/10.1071/9780643105485>

Nano, C. E. M., Bowland, A. E., Nano, T. J., Raghu, S., & Pavey, C. R. (2012). Demographic hurdles to persistence in *Acacia peuce* (F. Muell.): Effects of resources, fire and browsing on a threatened keystone tree species from arid Australia. *Journal of Arid Environments*, 80, 17–26. <https://doi.org/10.1016/j.jaridenv.2011.12.009>

Prior, L. D., McCaw, W. L., Grierson, P. F., Murphy, B. P., & Bowman, D. M. J. S. (2011). Population structures of the widespread Australian conifer *Callitris columellaris* are a bio-indicator of continental environmental change. *Forest Ecology and Management*, 262(2), 252–262. <https://doi.org/10.1016/j.foreco.2011.03.030>

Prowse, T. A. A., O'Connor, P. J., Collard, S. J., & Rogers, D. J. (2019). Eating away at protected areas: Total grazing pressure is undermining public land conservation. *Global Ecology and Conservation*, 20, e00754. <https://doi.org/10.1016/j.gecco.2019.e00754>

Stafford, D. M., Morton, S. R., & Ash, A. J. (2000). Towards Sustainable Pastoralism in Australia's Rangelands. *Australian Journal of Environmental Management*, 7(4), 190–203. <https://doi.org/10.1080/14486563.2000.10648501>

Stafford Smith, D. M., McKeon, G. M., Watson, I. W., Henry, B. K., Stone, G. S., Hall, W. B., & Howden, S. M. (2007). Learning from episodes of degradation and recovery in variable Australian rangelands. *Proceedings of the National Academy of Sciences*, 104(52), 20690–

20695.

Tiver, F., & Andrew, M. H. (1997). Relative effects of herbivory by sheep, rabbits, goats and kangaroos on recruitment and regeneration of shrubs and trees in eastern south Australia. *The Journal of Applied Ecology*, 34(4), 903. <https://doi.org/10.2307/2405281>

Travers, S. K., Eldridge, D. J., Val, J., & Oliver, I. (2019). Rabbits and livestock grazing alter the structure and composition of mid-storey plants in a wooded dryland. *Agriculture, Ecosystems & Environment*, 277, 53–60. <https://doi.org/10.1016/j.agee.2019.03.003>

Sandell, P. R. (2002). Implications of rabbit haemorrhagic disease for the short-term recovery of semi-arid woodland communities in north-west Victoria. *Wildlife Research*, 29(6), 591. <https://doi.org/10.1071/wr00089>

Silander, J. A., Jr. (1983). Demographic variation in the Australian desert cassia under grazing pressure. *Oecologia*, 60(2), 227–233. <https://doi.org/10.1007/bf00379524>

Wilson, A., Mulham, W., & Leigh, J. (1976). A note on the effects of browsing by feral goats on a Belah (*Casuarina Cristata*) - Rosewood (*Heterodendrum Oleifolium*) woodland. *The Rangeland Journal*, 1(1), 7. <https://doi.org/10.1071/rj9760007>

Woodell, S. R. J. (1990). Regeneration in the shrub *Acacia burkittii* FvM. ex Benth. in the Arid Zone of South Australia. *Biological Conservation*, 51(1), 39–48. [https://doi.org/10.1016/0006-3207\(90\)90030-s](https://doi.org/10.1016/0006-3207(90)90030-s)

Xu, C., Silliman, B. R., Chen, J., Li, X., Thomsen, M. S., Zhang, Q., Lee, J., Lefcheck, J. S., Daleo, P., Hughes, B. B., Jones, H. P., Wang, R., Wang, S., Smith, C. S., Xi, X., Altieri, A. H., van de Koppel, J., Palmer, T. M., Liu, L., ... He, Q. (2023). Herbivory limits success of vegetation restoration globally. *Science*, 382(6670), 589–594. <https://doi.org/10.1126/science.add2814>

About the IFLM Taskforce

In 2021, the Carbon Market Institute (**CMI**) formed the Integrated Farm and Land Management method Taskforce (**IFLM Taskforce**). The IFLM Taskforce is made up of a broad cross-section of CMI members and stakeholders that are committed to a high-integrity, fit-for-purpose carbon market in Australia.

Since its creation, the IFLM Taskforce has sought to develop and provide technical advice to the Australian Government on the creation of an IFLM method for the Australian Carbon Credit Unit Scheme (**ACCU Scheme**), including as part of the initial method prioritisation process.

The IFLM Taskforce also wants to see widespread consultation and clear development timelines in a way that ensures adequate public consultation and expert input from a wide range of experts and stakeholders.

The views of the IFLM Taskforce do not necessarily represent the views of CMI, nor any individual CMI member.