9 March 2026

Professor Karen Hussey
Emissions Reduction Assurance Committee (ERAC) Chair & Secretariat
Ngunnawal Country, 51 Allara St, Canberra ACT 2601 Australia
Department of Climate Change, Energy, the Environment and Water
By email: ACCUSecretariat@dcceew.gov.au

Dear Karen,

Re: Integrated Farm and Land Management Method – 2026 Consultation

Climate Friendly welcomes the long-awaited release of the draft *Carbon Credits (Carbon Farming Initiative—Integrated Farm and Land Management) Methodology Determination 2026* ('the IFLM method') for consultation.

As a founding member and Co-Chair of the *Carbon Market Institute IFLM Taskforce*, Climate Friendly has worked collaboratively with the Department of Climate Change, Energy, Environment and Water (DCCEEW), the Clean Energy Regulator (CER), and a broad group of stakeholders since November 2019 to support the co-design of the IFLM Method Framework. While the release of the consultation draft is important progress, there remain some key gaps compared to the original method Blueprint, including the failure to include soil carbon, avoided clearing and livestock emissions. We support the broader CMI IFLM Taskforce submission on the draft IFLM method, and provide additional Climate Friendly feedback in this submission.

The IFLM method has the potential to become a flagship, high-integrity carbon farming method under the ACCU Scheme. It will provide the foundation to make a meaningful contribution to a net zero Australia by 2050. CSIRO analysis estimates Australia's land sector could deliver up to 84 $MtCO_2$-e per year[1] of economically viable woody and soil carbon removals (compared with around 5 $MtCO_2$-e delivered annually under the ACCU Scheme to date). A reformed IFLM method could unlock abatement of this scale. However, the current consultation draft is both commercially and technically unviable, therefore implementation of the critical but targeted reforms recommended in this submission is needed to deliver on Australia's climate mitigation goals**.**

Summary of key issues and recommended critical, targeted reforms to consultation draft:

Overall, we welcome the release of the draft IFLM method, and some central features of the draft method represent important progress, including:

1. The modular structure, allowing for multiple activities and carbon pools in one method (subject to some important architecture improvements detailed later in this submission);
2. The inclusion of a different modelling and measurement approaches (subject to some important revisions noted below); and
3. The accommodation of next generation measurement technologies.

[1] CSIRO has estimated that regeneration of native plant species, soil carbon sequestration activities, and environmental plantings, and can make a substantial contribution to Australia's emission reduction goals, with a technical sequestration potential of 60.1 million tonnes, 115 million tonnes, and 33 – 478 Mt of CO2e respectively per annum over 25 years. At a carbon price of $30, the economic sequestration potential of the activities could be up to 39 million tonnes, 29 million tonnes, and 16 million of CO2e per annum, respectively. Source: Fitch P, Bataglia M, Lenton A, Feron P, Gao L, Mei Y, Hortle A, Macdonald L, Pearce M, Occhipinti; S, Roxburgh S, Steven A, (2022). Australia's sequestration potential, CSIRO. A report to the Climate Change Authority. Available at: h+ps://www.csiro.au/en/research/environmental-impacts/emissions/carbon-sequestration-potenital

There are seven major factors that, without critical but targeted reforms, drive the lack of viability and will materially reduce the number of eligible projects. Combined, these method settings create: a) **excessive and compounding discounts** to abatement volumes that are inconsistent with quantified and inherent risks; b) **unnecessarily limited application** of the method activities or accounting approaches; and c) requirements that **raise transaction and project management costs** without strengthening method integrity. Key method features that are contributing to these challenges and should be the focus of revisions include:

1. Lack of inclusion of a soil module, which limits geographic applicability
2. Artificial distinction between regeneration on cleared vs supressed land, which adds unnecessary complexity
3. Overly restrictive measure-model approach requiring calibration of a tree yield formula and use of FullCAM
4. Excessive discounting, particularly for regeneration on suppressed lands
5. Inclusion of forest cover requirement for measure-model approach, which creates a high risk, unnecessary administrative threshold with no ecological basis or carbon integrity rationale.
6. Failure to extend the measure-model approach to the full suite of vegetation management activities.
7. An onerous leakage management approach, that increases transaction costs and is disproportionate to the actual risk being managed.

We strongly urge the ERAC to request the following critical but targeted reforms prior to legislation of the method:

1. Include soil carbon in the first release of the method
2. Merge the regeneration modules to enhance usability
3. Adopt a “measurement using multi-phase sampling" approach instead of the FullCAM hybrid approach
4. Where projects apply a measurement using multi-phase sampling approach, remove excessive discounts
5. Where projects apply a measurement using multi-phase sampling approach, remove the requirement to achieve forest cover during the crediting period
6. Extend the “measurement using multi-phase sampling” approach to all current and forthcoming vegetation modules in the IFLM method
7. Amend the leakage provisions in response to new clearing controls introduced under the recently reformed EPBC Act.

Further details on the challenges and recommended revisions identified above are provided in the next section of this submission, followed by responses to the specific consultation questions.

Method Development Process:

Method development and maintenance are critical to stimulate investment in carbon farming and enable the land sector to contribute meaningfully to Australia’s net zero goals. The 5+ year drafting timeline of the IFLM has created instability and hesitancy among land managers and investors. Taking five or more years to reform and integrate activities that build on existing methods is unacceptable during the decisive decade for climate action. *It is critical that the Australian Government ensures timely and adequately resourced reform of ACCU Scheme methods, with clear service-level targets for method development and updates (e.g., 12–18 months for revisions).*

The ACCU Scheme requires a clear and streamlined approach to support the consistent application of multi-activity methods and to simplify participation for land managers. The IFLM method has been co-designed as a comprehensive and modular framework capable of accommodating a diverse range of land management activities under one project structure. Introducing additional overlapping multimethod frameworks, such as the framework proposed in the draft Improved Avoided Clearing method currently under development by the Queensland Government, risks creating market confusion, increasing administrative burden for the Clean Energy Regulator, and generating unnecessary duplication and inconsistency within the Scheme. Consolidating a single land sector modular framework, with IFLM as

the central integrated method, will improve efficiency, reduce complexity for participants, and provide a stable and consistent foundation for the future expansion of activity modules.

We support the method finalisation process outlined in the CMI IFLM Taskforce submission, and call on the Australian Government to appropriately resource and prioritise this process, including the following key elements:

March to May: Establishing *targeted working groups to address each of the critical reforms*, with clear statement of work and appropriately qualified experts engaged to promptly work through issues and develop solutions for broader consultation
May: Consult on proposed reforms with stakeholders to *test the solutions address concerns* raised in the initial stakeholder consultation
June: Revised draft method provided to ERAC for consideration
June/July: If required, ERAC conducts second 14-day consultation
July/August: Final review and ministerial recommendation by ERAC
August: Subject to ERAC advice, Assistant Minister Wilson legislates IFLM method

Thank you for the opportunity to contribute, and please do not hesitate to contact us if you wish to discuss our submission in further detail.

Kind regards

Skye Glenday
Co-Chief Executive Officer
Climate Friendly

1. Priority Method Revisions

This section outlines key concerns and priority reforms related to the consultation draft.

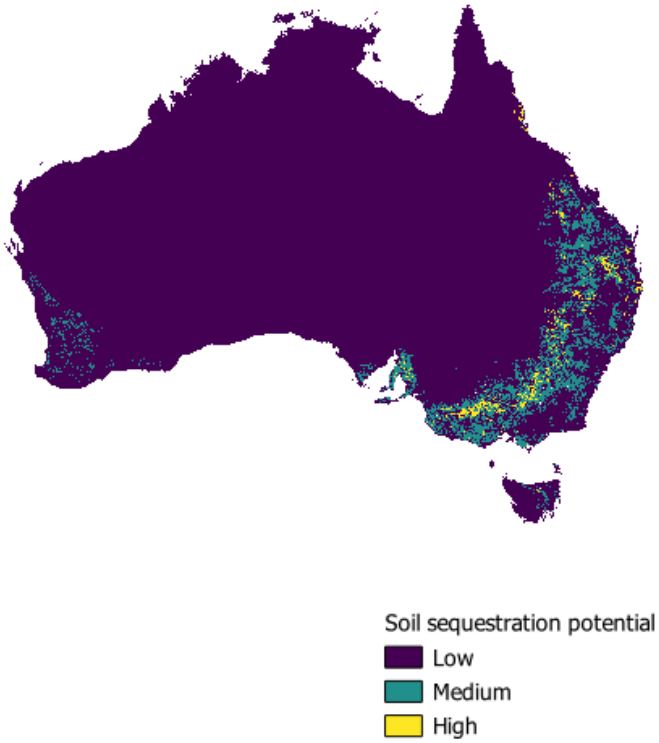
Key issue 1: Lack of inclusion a soil carbon module limits geographic applicability

Recommendation 1: Include a soil carbon module in the first release of the method

Rationale: The absence of a soil carbon module significantly limits the commercial viability and regional applicability of the method. For many farming systems, inclusion of soil and tree sequestration opportunities together represents the most material and scalable abatement opportunity and was a key driver behind the original method proposal and blueprint. The result of excluding soil will likely restrict participation to larger properties in more extensively managed, medium to lower rainfall regions, where regenerating woody biomass is viable on a standalone basis. It would miss an opportunity to drive carbon farming in more intensively managed agricultural regions with high per hectare carbon, biodiversity and productivity benefits (Figure 1)**.**

While we understand that the soil method review by ERAC is ongoing, the review should be accelerated to enable inclusion of soil carbon in the first release of IFLM. The soil module should mirror and be aligned with the post-review version of the standalone soil method, and transition should be an option for soil projects (but should not be mandatory, as this involves a decision by land managers to adopt additional practice changes which should not be forced).

Figure 1 Soil sequestration potential has a strong overlap more intensively managed agricultural regions with high per hectare carbon, biodiversity and productivity benefits. Source: McKenzie et al. (2017).



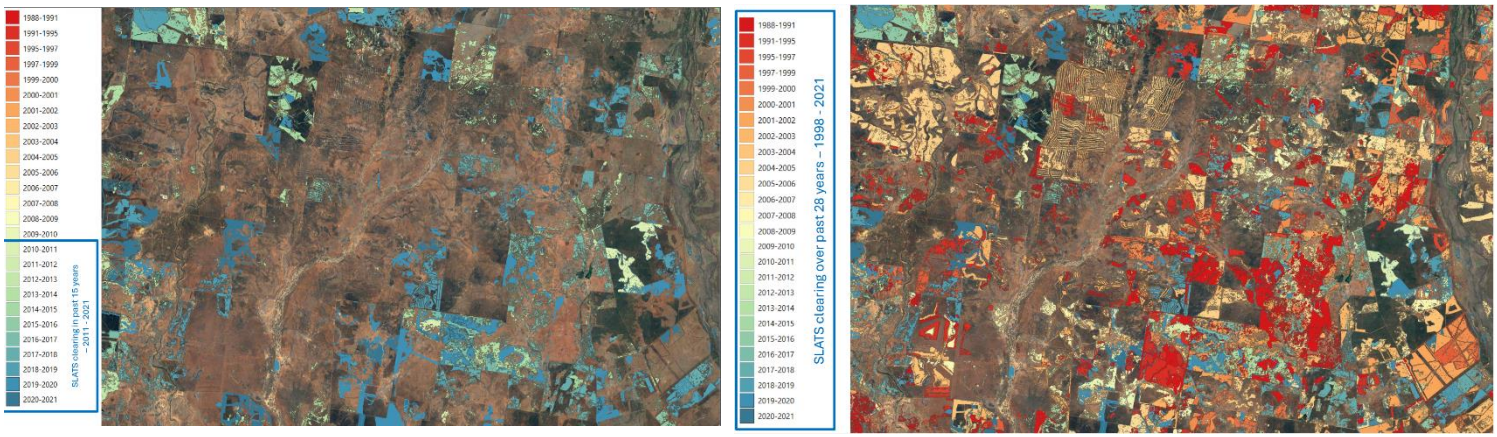
Key issue 2: artificial distinction between regeneration modules

Recommendation 2: The cleared and suppressed modules should be merged.

Introducing separate modules for cleared and suppressed land, with separate accounting approaches introduces complexity and artificial, arbitrary distinctions that are not ecologically informed and don't relate to the state of suppression at project start. This is contrary to the key goal of IFLM which is to streamline, integrate and use the latest measurement approaches. Under the proposed two module approach, land will be triaged into one or the other module based on an arbitrary date in which land was last cleared, rather than based on its suppressed carbon state. This will create a patchwork of land that is proximate with some classified as 'cleared' in the last 15 years, and other land classified as 'suppressed' if it was cleared 16+ years earlier. This land will operate under the same LMS. Further, clearing is a contributory, not sufficient factor, in demonstrating suppression and low carbon state of the vegetation. The rationale for different monitoring and accounting on cleared lands is unclear, given patchy regeneration patterns after clearing and because grazing after clearing materially affects regrowth rates. The 15-year temporal cut-off for defining land as 'cleared' is arbitrary, and risks creating inequities between neighbouring properties that are subject to different rules although their land may be in a similar low carbon condition and require similar land management practice changes. This undermines community trust and social license in the scheme (Figure 2).

Figure 2 Area of land in Queensland between Mitchell & Bollon, showing the arbitrary time delineation between land classified as cleared vs uncleared. Top panel shows SLATs detected clearing since 1988. Bottom panel shows SLATs detected clearing in past 15 years. This time bound delineation results in different portions of properties and neighbouring properties being subject to different modules, creating complexity and an artificial distinction that is not driven by the state of the suppressed land at project start.

Eligible for cleared land module **Eligible for suppressed land module**



Key issue 3: Overly restrictive measure-model approach

Recommendation 3: Remove the requirement to use FullCAM under the hybrid approach, and adopt a measurement-using multi-phase sampling approach instead

Rationale: The measure-model framework as drafted in the consultation version is tightly coupled to FullCAM. Some of the assumptions of FullCAM (such as the growth curve shape and requirement for forest attainment) are not always well aligned with diverse natural regeneration settings across different ecosystems. Carrying these assumptions over under the FullCAM hybrid approach fails to capture the main advantages of a measurement informed approach (i.e. more accurate measurements with lower uncertainty). The FullCAM hybrid approach requires measurement, but issues credits based on the Tree Yield Formula, which introduces an unnecessary step and a disconnect between measured and reported carbon stocks. Mandatory use of FullCAM puts forward-projections into

the method, which creates unnecessary uncertainties and has resulted in the application of a high, blanket discount. While forward projections are an important component of pre-feasibility assessments, they do not need to be included within the method and should not form the basis of creating for the measurement informed approach. Guidelines outside the legislation, potentially as part of the voluntary Code of Conduct, could instead be developed to provide greater guidance and consistency for forecasting approaches which are essentially a commercial, pre-feasibility matter, as opposed to regulatory issue.

Additionally, several problematic method safeguards have been introduced to address the limitations of the FullCAM hybrid approach. These include:

40% TYF discounting approach: withholding ACCUs to manage forecast error (the risk that FullCAM is mis-predicting sequestration) means that projects will not generate positive returns until late in the project
The low initial carbon stock threshold (5tC/ha), which is tied to a FullCAM limiting assumption that the growth curve starts from zero, will exclude substantial regeneration opportunities that are otherwise eligible.
Forest cover attainment rules, derived from the shape of FullCAM's forecast growth curve, introduces long term risk that eligible abatement that grows on a different trajectory will have to be removed and netted out of project crediting.

These compounding safeguards render the draft method unviable. None of these safeguards are required if the project adopts a measurement approach, decoupled from FullCAM. The draft methodology determination already contains the framework for a measurement approach, so this critical change is relatively easy to implement through targeted drafting changes, removing the additional problematic steps associated with putting measured changes back into FullCAM. More information about the proposed 'measuring using multi-phase sampling' is provided in Section 2 of this document.

The explanatory material released as part of the consultation notes that use of FullCAM as part of the hybrid approach relates to inventory alignment requirements for Eligible Abatement under the Offsets Integrity Standard (OIS). The justification related to inventory aligned eligible abatement involves a misinterpretation of the OIS requirements. More detailed discussion on this issue is provided under Section 2. In summary, a measurement informed approach credits changes in above-ground biomass, below-ground biomass, and debris, which are all carbon pools that are included in aligned approaches within in Australia's greenhouse gas accounts. It does so with higher accuracy, reduced uncertainty (which is accounted for through a probability of exceedance) and in a conservative way. This is in line with ERAC's interpretation of eligible carbon abatement, which requires credited abatement to come from pools accounted for under the Paris Agreement in Australia's inventory.

Key issue 4: Excessive discounting, particularly for regeneration on suppressed lands

Recommendation 4: Where projects apply a measurement using multi-phase sampling approach, remove excessive discounts and the requirement to attain forest cover

The TYF discount approach is no longer appropriate and should be removed. It should be replaced with the probability of exceedance approach.

The attribution discount should be removed because attribution is already achieved via other method settings.

Rationale: The current discounting approach applied to regeneration on suppressed lands and using the FullCAM hybrid approach materially reduces credited abatement relative to biophysical carbon storage outcomes. While conservative accounting is appropriate in accordance with the Offsets Integrity Standards (OIS), the scale and structure of discounting is disproportionate to perceived additionality risks and is not well founded on real data. As

mentioned above, the TYF discount has been applied to manage risks associated with forward-looking forecasts generated by FullCAM, and therefore this discount is not required when undertaking a measurement approach.

For projects undertaking measurement, attribution is already achieved via other method settings such as the eligible land and Land Management Strategy requirements (including flat or declining vegetation cover in baseline and inability to recover without a management practice change); the measured increase in carbon stocks in direct contrast to baseline trends; and the gateway system which requires demonstration of sustained progression in canopy cover.

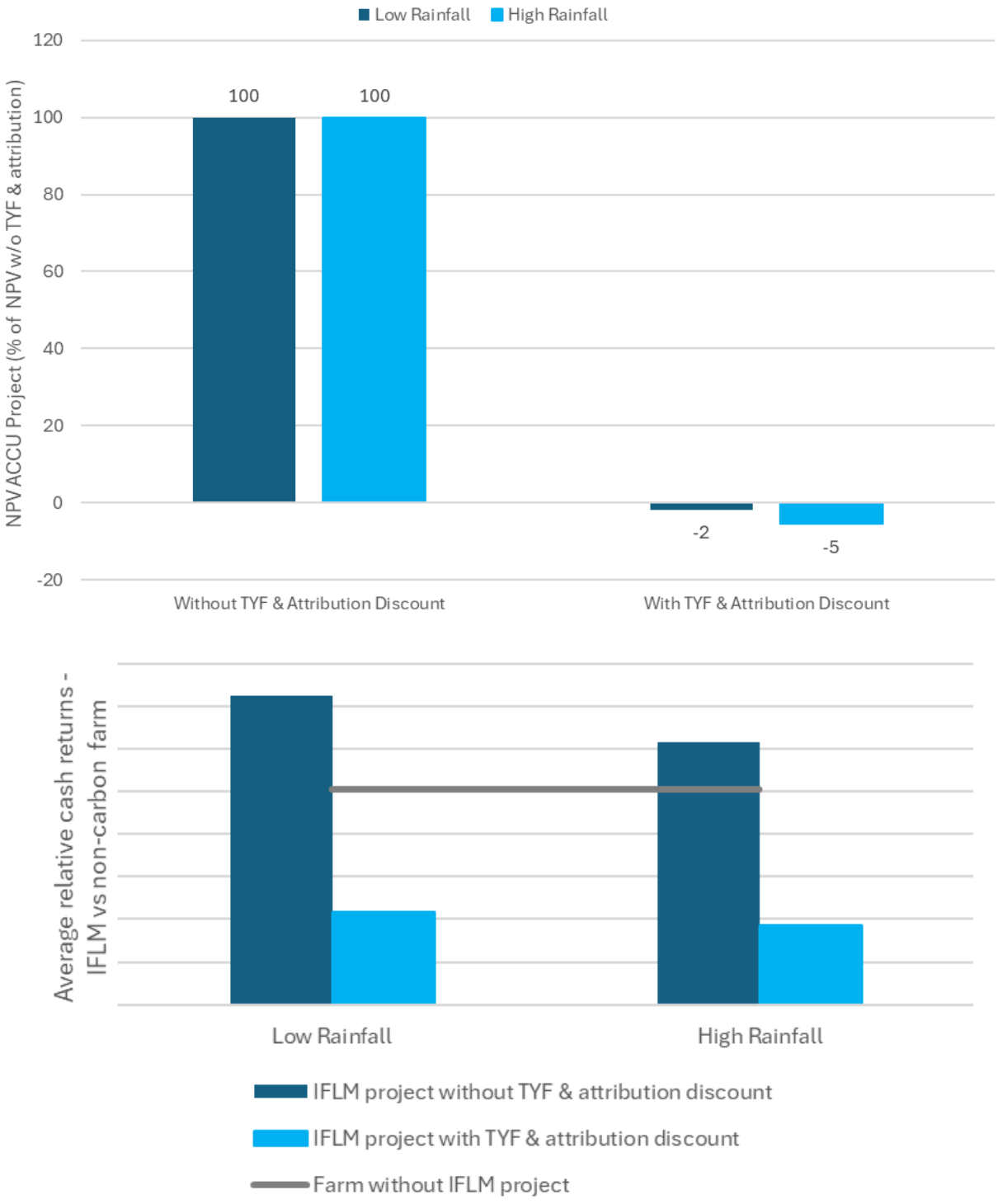
Our analysis shows that the proposed discount approach will render most IFLM projects economically unviable. This will reduce project uptake, constraining Australia's ability to achieve its NetZero 2050 targets and the operation of the Safeguard mechanism. Some key findings from our financial analysis:

A dollar of income received in 25 years is the equivalent to less than 10c today. This is the same impact as the ACCU withholding assumptions under the TYF discount approach.[2]
The Net Present Value (NPV) of ACCU projects in both the high and low rainfall zones was positive and commercially viable from Climate Friendly's analysis, while the NPV was negative when the TYF and attribution discounts were applied.
Cash income from an IFLM project without the TYF and attribution discount was higher than average cash income for a typical medium size farm, but lower than typical farming income when the TYF and attribution discount was applied. This suggests that IFLM projects would be able to incentivise behaviour change, but not without reforming the current discounts.

The graph below shows the impact of the discounting approach, relative to a project that receives a 25% discount for permanence (25 years) and risk buffers. Equivalent projects in either rainfall zones were economically viable with standard ACCU scheme discounts. However, the additional IFLM discounts rendered projects unviable from Climate Friendly's analysis. More information on the discounting approach is summarised in Section 2 of this document.

[2] This assumes a real discount rate of 11.8%, which is the rate assumed by ABARES in a recent report titled: Spatial Agriculture, Forestry and Environment Model: Technical Documentation (v1 December 2025) Lachlan Morris, Linden Whittle, Liam Kelly, Rob Coelli and Simon Hone Research by the Australian Bureau of Agricultural and Resource Economics and Sciences Technical report December 2025

Figure 3 Commercial analysis comparing Net Present Value of an ACCU project with and without the TYF & Attribution discounts (top); and average cash returns of an IFLM project (with and without the TYF and attribution discount), relative to cash returns from a medium size farm (bottom).



Key issue 5: inclusion of forest cover requirement for measure-model approach

Recommendation 5: Remove the requirement to achieve forest cover during the crediting period.

Rationale: Regeneration trajectories vary widely depending on climate, soils, grazing history, and management capacity. Mandating forest outcomes within a limited timeframe will rule out some ecosystems that will generate genuine abatement, but over longer time horizons or as part of a sub-forest woodland system. The time-bound forest cover attainment requirement seems unnecessary if projects can demonstrate growth over time through repeated measurements. In other words, the arbitrary classification of "forest" cover is no longer needed to benchmark progress when taking actual measurements of carbon stock change.

The updated gateway approach proposed in the draft is well aligned with this proposal, measuring change in canopy cover or change in carbon stock rather than a static threshold approach. This will provide confidence that regeneration is storing carbon and progressing towards forest cover, without needing specified timeframe for progression.

Inclusion of the forest attainment requirement has been justified on the basis of the OIS for Eligible Abatement. This is also the same justification for use of FullCAM under the hybrid approach (refer Key Issue 3). This seems to be based on a misinterpretation of this requirement. The ERAC 'Information Paper on the Offsets Integrity Standard'[3] sets out how ERAC assesses this requirement, including recognising that different approaches may be applied between national and project accounting, due to the different applicable scales:

> "*the Committee interprets the standard as requiring the abatement credited under the ERF's methods to be from sources and sinks that are accounted for by Australia under the Kyoto Protocol and Paris Agreement. However, the Committee does not require methods to use approaches that are consistent, or even 'not inconsistent', with those contained in the National Inventory Report. The methods contained in the National Inventory Report are designed to estimate emissions and removals at a national scale, while methods are designed to estimate abatement at a project-scale. The differences in focus and scale necessitate different approaches*"
>
> - ERAC Information Paper on the Offsets Integrity Standards, 2021

Additionally, we note that sequestration from sparse woody vegetation (regeneration that has not yet passed the forest threshold) is included in the national inventory, regardless of whether it forms forest cover.[4] Consequently, we do not believe that this method setting is required for projects that take a measurement approach.

We support the continued inclusion of this requirement for projects that use a FullCAM only approach, as this limitation is more appropriate in that context to align the project with the model limitations of the FullCAM public release tool.

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[3] Available at: https://www.dcceew.gov.au/sites/default/files/documents/erac-information-paper-offsets-integrity-standards.pdf

[4] 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)."

Key issue 6: Limited application of measure model approach to regeneration on suppressed land

Recommendation 6: Extend the "measurement using multi-phase sampling" approach to all current and forthcoming vegetation modules in the IFLM method

Rationale: As currently drafted, the measure-model component is only permitted for regeneration on suppressed land activities. This creates many technical and operational challenges and inefficiencies, requiring different accounting and measurement approaches for projects undertaking multiple activities. It also reduces incentives for existing environmental plantings or native forest managed regrowth projects to transition to IFLM, by failing to offer alternative measurement approaches.

The measure-model approach should be extended to all vegetation activities allowing projects to use a single accounting and measurement approach across an integrated suite of land management activities. Expanding the range of activities that can undertake measurement will lead to more accurate abatement estimates. Future modules such as plantation or farm forestry would also benefit for ability to use a measurement approach. This was always the intent under the method Blueprint and is strongly supported by a wide breadth of stakeholders.

Key issue 7: onerous leakage management approach

Recommendation 7: Amend the leakage provisions in response to new clearing controls introduced under the recently reformed EPBC Act

Conduct a review of the EPBC Act to assess whether it adequately addresses risk of clearing displacement, without the need to specific leakage management measures in the method.

If the EPBC Act is considered insufficient to address leakage concerns, leakage should only be triggered if clearing rates in the Vegetation Accounting Area (VAA) exceed historical clearing rates.

The extent of the Vegetation Accounting Area should be risk-based, limited to parts of the enterprise within the same region or state, or only to jurisdictions where clearing is permitted.

Rationale: The EPBC Act prevents clearing on any land with vegetation of national significance, or with threatened species, unless it was cleared in the past 15 years. On this basis, we suggest that the newly revised EPBC Act likely provides sufficient protection against displacement of clearing activities.

If it is determined that the EPBC Act does not effectively manage leakage risk, we suggest that the leakage accounting should only triggered if clearing exceeds the historical average clearing rate in the VAA. The current leakage assumes that any clearing in the VAA is considered leakage, without considering historical clearing rates. Continuation of such activities after project commencement are unlikely related to the carbon project. A more detailed response to this issue is summarised in response to Question 11.

The proposed leakage framework extends whole-of-farm accounting requirements to all land parcels within a business enterprise, creating monitoring obligations that are disproportionate to the actual leakage risk. This approach also reduces the flexibility land managers have over other parts of their estate, which may discourage participation, particularly among those with multiple landholdings. By restricting the VAA to only other land holdings within the same jurisdiction, and only those jurisdictions where clearing is permitted, the leakage provisions will be better matched to the actual risk of leakage.

2. The 'measurement using multi-phase sampling' approach

This Section provides a summary of the proposed 'measurement using multi-phase sampling approach, which is recommended in place of the Hybrid-FullCAM approach in the draft methodology determination. The approach is supported by and has been developed in collaboration with CMI IFLM Taskforce members. However, we have not had time for all members to undertake a review prior to the closure of the public consultation, and hence this is included as part of Climate Friendly's submission.

Our understanding of the FullCAM-Hybrid process

The proposed FullCAM-Hybrid approach in the draft method requires proponents to forecast carbon stock change using the Tree Yield Formula (TYF), then periodically recalibrate the TYF using measurements. Credits are issued against the forecast and reconciled with the measured carbon stock at the end of the crediting period. This design means the method must include mechanisms to manage forecast uncertainty. It proposes to do this primarily by withholding 40% of credits until the end of the 25-year crediting period. This withholding mechanism is only necessary because the abatement is forecast (as opposed to measured) and it is not clear from the outset how well the calibrated Hybrid FullCAM will predict abatement throughout the project lifecycle.

If crediting is instead based on measured change between points in time, the forecasting components (i.e. the Tree Yield Formula) and discounting associated with their unquantified uncertainty become unnecessary.

An alternative proposal: measurement using multi-phase sampling

Key recommendation related to this topic:

Recommendation 3: Remove the requirement to use FullCAM under the hybrid approach, and adopt a measurement-using multi-phase sampling approach instead

Instead of the FullCAM-Hybrid approach, an alternative approach called 'measurement using multi-phase sampling' is proposed.

The multi-phase sampling approach is measurement-informed and compares validated carbon stock estimates over time. Accuracy improves through the map phases and is statistically quantified over time through repeated measurement rounds.

1. **Phase 1**: production of a property wide or regional biomass map that includes coverage of the project area. This map provides a spatially explicit estimate of biomass for every pixel across the landscape, informed by remote sensing and environmental data layers.
2. **Phase 2**: improves accuracy through direct measurement (including airborne LiDAR, terrestrial laser scanning or trunk diameter measurements) which are converted to biomass by applying allometric equations, then used to validate the map accuracy across carbon estimation areas. This validation provides statistically quantified uncertainties.

A more detailed description of the key steps involved in a 'measurement using multi-phase sampling' approach is provided in Attachment 1.

Comparison of the FullCAM-Hybrid & measurement using multi-phase sampling approaches

Table 1 Summary of FullCAM Hybrid and measurement using multi-phase sampling comparisons approaches

Estimation approach	FullCAM Hybrid	Measurement using multi-phase sampling
Mapping approach	Stratify CEAs according to FullCAM's maximum attainable biomass layer (M) and estimate average carbon stocks at a central modelling point.	Use spatially explicit maps of aboveground woody biomass to calculate carbon stocks across every pixel and sum across a CEA.
Measurement protocol	Measure CEAs once every five years.	Update carbon stock maps and validate using measurements from a sample of CEAs at each reporting period, with every CEA measured at least every 10 years.
Uncertainty calculation	Forecast-then-reconcile: compare measured carbon stock against the locally calibrated FullCAM measurement to release withheld credits.	Measure-validate-then-credit: compare biomass maps with measurements and issue proportionally to the confidence of a carbon stock increase.
Discount timing	40% credits are withheld to the end of the crediting period.	Discounting for uncertainty is proportional to actual uncertainty and applied progressively at each reporting period.
Forward projections	Credits are issued based on projections following the Tree Yield Formula. Projections are recalibrated to local changes after year 10.	No forward projections.
Disturbances	Disturbances added to the FullCAM simulation and/or split into separate CEAs.	Disturbance impacts and recovery outcomes are measured directly.

Mapping process

In both approaches, projects are delineated into Carbon Estimation Areas (CEAs) that meet the prescribed eligibility criteria for the IFLM method.

The FullCAM Hybrid approach also requires that CEAs meet the FullCAM modelling assumptions of having low initial carbon stocks or low initial canopy cover. CEAs are stratified using the maximum attainable biomass layer (M). This has the effect of reducing the CEA to a single modelling point, disregarding spatial variability in carbon stocks across the area.

In a multi-phase sampling approach, measurements validate a spatially explicit biomass map and CEA carbon stocks are derived from the sum of all pixel-level estimates within the CEA boundary. These validated biomass maps are compared against each other over time to calculate net change in abatement

Measurement protocol

The current IFLM draft already includes many of the required elements for measurement. The FullCAM Hybrid and measurement using multi-phase sampling approaches rely on the same protocols and technologies. The key difference is in how measurements are used.

In the proposed Hybrid approach, measurements are averaged to estimate the CEA mean carbon stock and occasionally recalibrate the Tree Yield Formula, to align the FullCAM estimates to local conditions. Under the FullCAM-Hybrid approach, measurement is assumed to occur every five years and the FullCAM model is not formally adjusted until year ten of the crediting period.

Under the alternative measurement approach, measurements are used to validate spatially explicit biomass maps, which are then used as the basis for calculating carbon stock change. A carbon stock estimate would be produced at the start and end of each reporting period. Regular measurement is required to assess year-to-year variability in growth. Each carbon stock estimate would be validated using measurements across a sample of CEAs. Spatially explicit multi-phase sampling can share costs across regions or project portfolios, enabling cost-effective estimation of carbon stock change.

Uncertainty calculation

Previous recommendations related to this topic:

Recommendation 4: **Where projects apply a measurement using multi-phase sampling approach, remove excessive discounts and the requirement to attain forest cover**

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 because attribution is already achieved via other method settings.

The proposed FullCAM-Hybrid discounting approach follows a "**forecast-then-reconcile"** structure. Under this approach, credits are issued against a future-modelled growth trajectory. The TYF discount withholds credits to manage the risk that the FullCAM forecast has overestimated relative to measurements. The final measured carbon stocks are benchmarked relative to FullCAM at the end of the crediting period. Any discrepancy between measurements and FullCAM estimates otherwise addressed through recalibration of the TYF. This is conservative, but the discount and delayed model adjustment is a direct consequence of risks associated with forecasting carbon stock into the future.

The alternative measurement-based approach operates differently. Credits are issued only when a measured increase in carbon stock is detected and validated, and only to the extent that the increase is statistically robust. This is an **"measure-validate-then-credit"** approach. There is no forecasting risk, and therefore the TYF discount is not required. Instead, discounting should be commensurate with sampling uncertainty.

Under measurement using multi-phase sampling, the proposal is to use probability of exceedance as the basis for discounting. This is the same statistical framework used for the 2021 Soil Carbon method. The probability of exceedance statistical test asks: "given the uncertainty in two carbon stock estimates, how confident are we that the carbon stock has actually increased?" In other words, the current measurement is compared with the previous measurement, and the extent of overlapping uncertainty is assessed. Both measurements must meet statistical accuracy requirements and have quantified uncertainties.

If measurements are precise and change is clear, credits are issued for the measured change. If uncertainty is high, either due to insufficient sampling or because the change is small, fewer or no credits are issued for that interval. This means that discounts are reduced as accuracy improves, providing incentivises for investment in improved data quality.

Discount timing

In the draft method, uncertainty associated with the FullCAM TYF forecast is managed through a single, lump sum release at year 25. This combination of long-term credit withholding, increased monitoring costs, and the risk of lump-sum reconciliation will render many projects economically unviable, despite delivering genuine abatement (refer Key Issue 3).

Under measurement using multi-phase sampling credited amount reflects the statistical confidence in the observed change. This comparison of measured vs estimated carbon stocks quantifies uncertainty due to inherent sampling and measurement error. The discount is applied continuously, at each reporting period, proportional and specific to the data of each measurement round.

Forward projections

As mentioned previously, the FullCAM Hybrid approach involves forward projections of carbon stock. In contrast, the measurement using multi-phase sampling approach does not allow for forward projections.

We recognise that forward projections of carbon stock are needed to inform investment decisions, support project development, and help with project planning. However, forecasting is a commercial matter and does not need to be regulated as it is not linked to issuance of carbon credits. It could for example be managed via guidelines from the Clean Energy Regulator or as part of the voluntary carbon industry Code of Conduct, outside the method.

Disturbances

The proposed Hybrid approach handles disturbance through a combination of modelled growth pauses, recovery curves, debris assumptions, and re-stratification of CEAs when disturbance affects only part of the area. These requirements exist because FullCAM does not 'observe' disturbance – it is decoupled from actual carbon stock change. The model must be told that an event occurred, then its trajectory must be manually adjusted to account for it. This creates a layer of assumptions about the timing, severity, and recovery pattern of the event, all of which introduce further uncertainty into the credited amount.

Under measurement using multi-phase sampling, the disturbance outcome is directly the observed and measured. If a fire, drought, or other event reduces carbon stocks, this will be detected using a combination of remote sensing and routine self-disclosures by the land manager. Where measurements show loss or no growth, this is reported as part of the project's net accounting and carried forward into subsequent estimates. The method does not need to model what happened between measurements, because it is crediting the measured and validated result.

Existing ACCU Scheme natural disturbance reporting triggers (i.e. such as in the case of a natural disturbance or clearing event) are sufficient safeguards to ensure these matters are dealt with and to require remeasurement following significant events. These triggers are already understood by proponents and regulators and part of project permanence plan requirements that are scheme wide.

Eligible carbon abatement

DCCEEW has noted concerns that departing from FullCAM may create divergence with the National Inventory. However, when the term "FullCAM" is being used, it appears to be used with reference to different tools and systems. It is referred to with at least four distinct meaning. While related, these are already distinct tools with different purposes (Table 2).

Table 2. Four different contexts in which the term 'FullCAM' is used

FullCAM context	Description
A system of equations	At its core, FullCAM is a set of interacting models describing forest and pasture growth, organic matter decomposition, and soil turnover. These include 3PG, the Tree Yield Formula, GENDEC and RothC. Model behaviour is governed by parameters (e.g. maximum attainable aboveground woody biomass, growth rates) and datasets (e.g. rainfall, Forest Productivity Index). Parameters are calibrated differently for different applications. The equations can be implemented in many ways, from Excel to GIS. Implemented correctly, the equations always give equivalent results A description of FullCAM the "system of equations" is available here: The FullCAM Carbon Accounting Model: Development, Calibration and Implementation for the National Carbon Accounting System - NCAS Technical Report No. 28[5]
Australia's National Greenhouse Gas Inventory	FullCAM is used for some of Australia's national land sector accounting, including forest land-use transitions, commercial plantations, farm forestry, native forests, grasslands, croplands, and savanna fire disturbances. Not all carbon pools or disturbances in the National Inventory use FullCAM. For example, carbon stocks in sparse woody vegetation and disturbances from rangelands fires are estimated using other approaches. Land-use change is detected by the National Forest and Sparse Woody Vegetation dataset (remote sensing). Fire data and FPI come from AVHRR satellite imagery; crop and pasture yields are generated by a rainfall-based water-balance model. Commercial harvests come from state forestry data. The National Inventory is run on a spatially explicit basis with updated datasets, including timeseries of forest and sparse woody classification, time it is run. How Australia's national inventory is compiled, is described here: https://www.dcceew.gov.au/climate-change/publications/national-inventory-reports
Public Release Application or Interface (4+ versions)	DCCEEW has intermittently released versions of FullCAM as a downloadable application and, more recently, a browser-based interface application. There have been several releases: the Reforestation Modelling Tool in 2013, FullCAM 2016, FullCAM 2020, and the forthcoming FullCAM 2024 (or 2026?) and SavCAM. The application is not spatially explicit and does not use remote sensing data to estimate forest cover. It models a single point location at a time. Default datasets (e.g. M, rainfall, FPI) and parameter sets for various contexts are available, but users must configure simulations themselves. The different versions of the FullCAM application provide no information about real-world carbon stocks or disturbances (i.e. they are not trued up with actual project measurements) The latest public release versions are available here under the section "download options": https://www.dcceew.gov.au/climate-change/publications/full-carbon-accounting-model-fullcam
Directed usage for specific methods and release versions via CFI Guidelines	Many carbon farming methods rely on or mandate the use of government tools for carbon estimation The CFI Mapping and Modelling Guidelines prescribe what parameters, data inputs and simulations must be run for different methods. These often differ from National Inventory parameters and datasets, as they commonly require project specific data inputs. Because the FullCAM application models only a single point, CFI Mapping Guidelines define how to generalise a simulation to a larger Carbon Estimation Area. Project maps commonly differ from the NFSWV dataset and typically have higher local accuracy requirements. The Guidelines encode safeguards, for example, requiring initial canopy cover below 20% and requiring forest attainment within a fixed timeframe, to ensure ecosystem change reflects the specified FullCAM simulations The method specific guidance for different public releases and methods is also available here under the section called "Use of FullCAM for Emissions Reduction Fund Projects": https://www.dcceew.gov.au/climate-change/publications/full-carbon-accounting-model-fullcam

[5] https://www.dcceew.gov.au/themes/custom/awe/fullcam/Help-FullCAM2024/reps/TR28%20The%20FullCAM%20Carbon%20Accounting%20Model%20Development,%20Calibration%20and%20Implementation%20for%20the%20National%20Carbon%20Accounting%20System.pdf

In addition to being different tools, there are differences in the core mapping processes that define how FullCAM is applied. The National Inventory and CFI projects use different datasets to classify and monitor vegetation. The National Inventory relies on NFSWVD, a remotely sensed product calibrated for continental-scale reporting. The CFI Mapping Guidelines further require project proponents to assess the fitness for purpose of any dataset they use, considering its age, resolution, accuracy and relevance. For example, HIR projects must produce locally validated vegetation maps meeting a regulated >85% accuracy threshold.

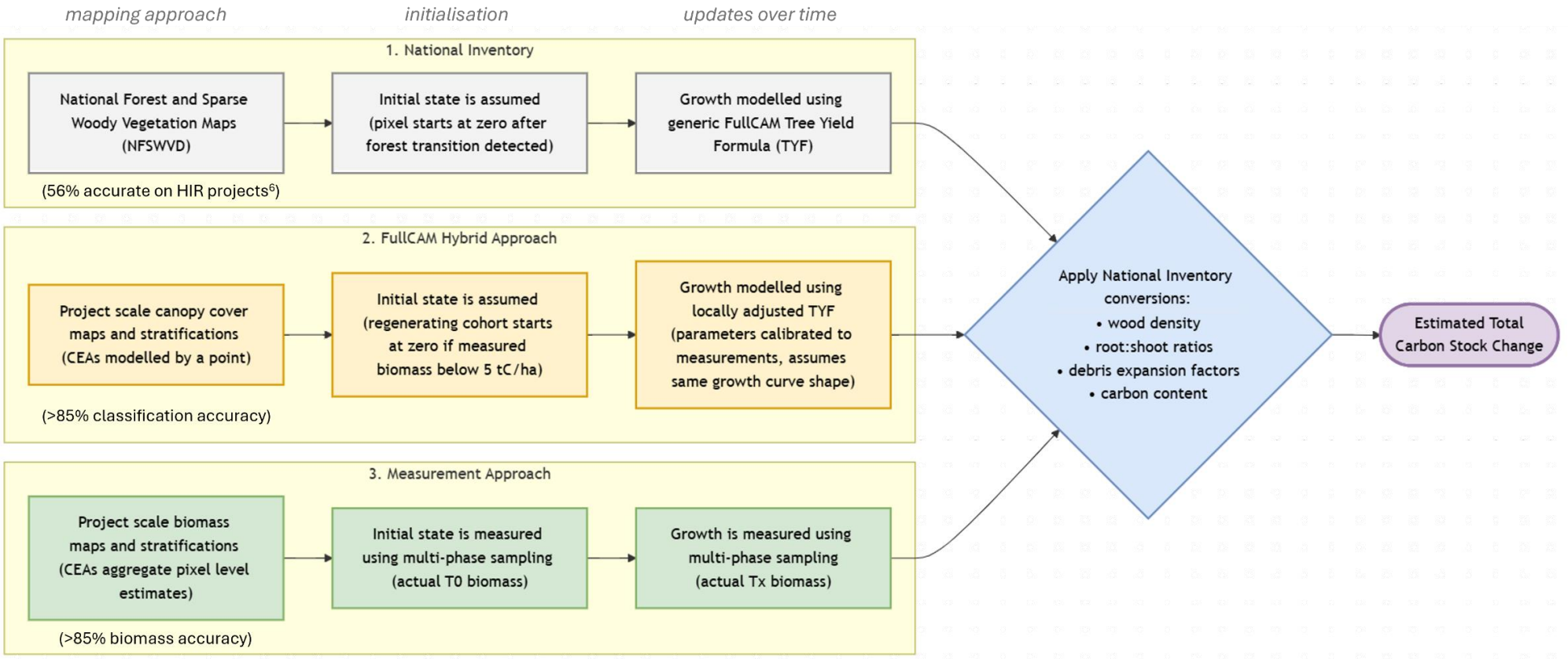
A comparison of NFSWVD against high-resolution airborne lidar across five HIR project sites in the rangelands and found an overall accuracy of just 56.4%, well below the 85% threshold required of projects[6]. NFSWVD failed to detect four out of five sparse woody vegetation sites identified by the lidar reference data and often misclassified forest as sparse woody vegetation. ERAC has recognised that NFSWVD is not suitable for detecting early-stage regeneration for carbon farming projects and that national-scale and project-scale estimation require different approaches. Project-level assessment requires higher-quality, locally validated data.

Anticipating that a measurement approach will be subject to the accuracy requirements of subsequent CFI Guidelines, measurement with multiphase sampling biomass provides higher-resolution information about actual carbon stocks than the National Inventory or FullCAM Hybrid approaches. Neither the National Inventory application of FullCAM nor the FullCAM public releases used for calculating project abatement in the ACCU Scheme directly observe carbon stock, both infer it from changes in forest cover classification detected by remote sensing, then apply growth models. Consistency between the National Inventory and proposed measurement approaches is demonstrated in Figure 4.

As mentioned earlier in this submission, multi-phase sampling is compatible with the pools reported in Australia's greenhouse gas accounts and could contribute to improving national estimates over time rather than diverging from them. Spatially explicit project data could be used to improve the national dataset via the national data-sharing platform recommended in the Independent Review of ACCUs (see Appendix 1). However, this data sharing arrangement should occur outside the IFLM method and not be embedded within it.

[6] Moore, T., O'Reilly-Nugent, A., Clarke, K., & Waters, C. (2025). National-scale datasets underestimate vegetation recovery in Australian human-induced native forest regeneration carbon sequestration projects. *Communications Earth & Environment*, 6(1), 802. https://doi.org/10.1038/s43247-025-02725-z

Figure 4: A comparison of the National Inventory, FullCAM Hybrid and measurement approaches to estimating carbon stock change.



3. Responses to consultation questions

This section provides responses to the specific consultation questions from the Department of Climate Change, Energy, Environment and Water (DCCEEW) and ERAC, including recommendations for method revisions.

Modular structure

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?*

A. Not in their current form. Recommendations that could achieve this objective are outlined below.

Recommendation 8: Amend the overarching summation equation (Equation 2) to include a module-neutral summation term that sums across all current and future schedules.

Recommendation 9: Refer to approved Schedules generically rather than naming activities in the framework, which sets a precedent for adding future modules

Rationale: The structure of the draft method contains an overarching framework section that provides 'governance' of the project; and Schedules (which act as 'modules') containing rules bespoke to specific activities and measurement 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. The current draft fails to achieve this aim. The method cannot expand without a slow bureaucratic process 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.

Definitions

Recommendation 10: Harmonise definitions across the method, and with other standalone methods; and consolidate all definitions within the overarching framework rather than the Schedules

Rationale: The draft method contains definitions both in the overarching framework and within individual Schedules. This duplication risks inconsistency across activities and between different carbon farming methods (e.g. avoided clearing) and will create unnecessary complexity in implementation.

An example of this challenge and lack of harmonisation is the clearing definition in the consultation draft. The definition of "***comprehensive clearing***" in Schedule 1 "*means the destruction of trees or saplings, or both, by mechanical or chemical means that may be accompanied by use of fire, leaving the land in a non-forested state for pastoral land use.*" Elsewhere, clearing has a narrower definition with a time bound component of 15 years and then in the method framework a "***clearing event***" is defined to mean "*an event caused by humans that adversely affects existing carbon stock or its accumulation.*" The interaction of these broad and then narrow definitions risks creating

confusion, and this set of specific definitions further highlights the separate points made in this submission on the artificial distinction between suppressed regeneration and cleared regeneration, noting that clearing is commonly a contributory factor although it may have occurred at vastly different points in time since settlement, and subsequent suppression is a necessary condition for eligibility.

Architecture for avoided emissions

Recommendation 11: Include structural placeholders in the method to accommodate the future addition of an avoided clearing module, and if possible, avoided emissions modules.

Rationale: The draft method does not provide for the future inclusion of avoided loss of sequestered carbon (e.g. avoided clearing) or emissions avoidance activities (e.g. enteric emissions reduction or energy efficiency). There are no apparent legislative barriers to incorporating an avoided clearing module in the future.[7] This is particularly timely given current work by the Queensland Government to develop an avoided clearing method, which Climate Friendly supports as for inclusion as a module in IFLM (note we are opposed to duplication of a framework method and regeneration activities as currently proposed in this proponent led process).

While there may be legislative constraints on combining emissions avoidance and sequestration activities within a single method, it is understood this issue has been addressed in the Savanna Burning method by treating emissions avoidance as part of overall project emissions, and through an intentionally broad description of the project activity. A similar approach could be adopted for the IFLM method or, alternatively, enabled through legislative reform.

Key issue 1: Lack of inclusion a soil carbon module limits geographic applicability

As highlighted in the Key Messages section earlier in this submission, the exclusion of soil carbon from the draft method is highly problematic. A soil carbon module should be included as a priority.

Key issue 2: Artificial distinction between regeneration on cleared vs supressed land

As highlighted in the Section 1 Priority Method Reforms in this submission, current drafting of the method has separate modules for cleared and suppressed land. We suggest that these modules could be merged. A more detailed response to this issue is articulated under Question 6.

Barriers to participation

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

A. As mentioned in the Section 1 Priority Method Reforms above, there are numerous barriers to participation in the method which cumulatively make the current method commercially and technically unviable However, if the reforms suggested throughout this submission are implemented, we believe the IFLM method provides a good framework to

[7] Avoided clearing projects are defined as sequestration offsets projects under Section 54 of the CFI Act, which defines a sequestration offsets project as a project with an objective "(b) to remove carbon dioxide from the atmosphere by sequestering carbon in, *and to avoid emissions of greenhouses gases from*, one or more of the following:(i) living biomass;(ii) dead organic matter; (iii) soil." (emphasis added by the author).

address barriers and unlock participation at scale in land sector carbon farming supporting delivery of Australia's net zero commitments and our Agricultural and Land Sector Plan.

While numerous barriers are discussed throughout the document, in this section we raise issues related to baselines for regeneration activities, and audit reform.

Baseline for regeneration activities

Recommendation 12: Reduce the baseline non-forest cover requirement to seven years.

Rationale: The current requirement that land must not have contained forest cover for 20 years is unnecessarily restrictive. While the longer period may assist in establishing clearing history, extending the non-forest cover requirement to 20 years risks excluding land with genuine regeneration potential. Evidence of suppression can be adequately demonstrated through a flat or declining baseline, supported by management evidence provided in the Land Management Strategy. In addition, reducing the non-forest cover requirement to seven years prior to project registration would be sufficient, and would align with Paragraph 20AA of the CFI Rule.

Audit reform for IFLM projects

Finding 1: The draft IFLM method has achieved substantial reform in streamlining audits for proponents undertaking multiple activities.

Rationale: The audit period is the peak expense period for ACCU projects. At the time of writing, Climate Friendly has overseen approximately 190 audits. Over the past seven years, we have spent $2M on external auditor fees (i.e. not including our staff time, data collection and processing costs, or travel expenses). We maintain two separate teams, including eight full time staff dedicated exclusively to audits. Over the same time period, we have spent over $8M on indirect audit costs associated with our audit and due diligence staff salaries, support-staff salaries, field visits, mapping, drone assessments, legal advice and other audit support services, on top of the external audit costs.

Figure 5 shows the indicative internal and external costs for a typical regeneration project in our portfolio over the full 25 years of operation. The graph shows a significant spike in both internal and external costs in an audit year.

Figure 5 Relative cost trends for a typical ACCU Scheme regeneration project (excluding on-farm implementation costs)

Climate Friendly conducted hypothetical modelling and found that audit reform could deliver between a 15-48% reduction in the commercial viability threshold of a new carbon farming project, with higher thresholds applicable for smaller projects. In other words, the streamlined audit reforms under the IFLM method should theoretically enable smaller multi-activity projects to become commercially viable. Unfortunately, this benefit has been outweighed by excessive discounting and other approaches, as described earlier in the document.

Transition

Q3. *The exposure draft allows projects to transition from existing projects under the 2024 EP method and the NFMR method 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?*

Finding 2: We support the position outlined in the explanatory consultation material that projects should be able to apply to transfer but that that there should be no requirement for mandatory transition from standalone methods. To be clear, proponents should have the option to stay on the method that existed at the time of project registration.

Rationale: The explanatory material notes that existing projects under EP, NFMR or HIR could apply to transfer if they meet the eligibility rules. We assume that this would be expanded to other activity types, such as soil, avoided clearing and livestock, as additional modules are added. We support this approach that existing projects that meet eligibility transfer rules can apply to transition. To be clear, we do not support forced transition from standalone methods to IFLM, as the integrated method involves additional activities and obligations.

To ensure the investment certainty and ACCU Scheme stability, proponents should have the option to stay on the method and model that existed at the time of project registration/transition. The standalone methods that preceded the IFLM method should be recognised as fundamentally different to the IFLM method. Projects transitioning to the IFLM method will take on different land management obligations associated with an expanded set of carbon management activities and/or carbon pools. Some proponents may not be willing to take on such obligations, and they should have the right to choose to continue with the current selected activities. Transitioning projects will likely require additional consents due to these expanded obligations. Forcing such transitions would reduce trust and threaten integrity of the scheme and potentially override consent rights, including related to Native Title Holders. The only potential exception to this rule may be if there are fundamental issues with method equations, such as those that affected the 2018 soil carbon and savanna burning methods, but where the overall project activity is not changing. We are concerned by the recent ACCU Scheme update post the review completed by Professor Ian Chubb which suggests that DCCEEW is considering forced transitions but provides no clarity on the limited circumstances in which these are being considered.

Transition projects considered 'new' projects

Recommendation 13: IFLM transition projects that take on a new activity or different measurement approach should be considered 'new' projects at the time of transition. Crediting under IFLM would commence from the carbon stocks at the time of transition.

Rationale: Many IFLM transition projects will take on additional carbon farming commitments as part of the IFLM project. Projects that take on these new commitments should be considered a 'new' project under the ACCU Scheme. We believe this could be achieved under the current legislation by adding a newness in lieu requirement under the method, benchmarking newness back to the time of registration of the former project. The baselines corresponding to the former method would also need to remain fixed to the original project. A dedicated expert working group should be established to work through the rules associated with transition in the next phase of the co-design process.

Crediting period for transitioning projects

Recommendation 14: Projects transitioning to the IFLM method should have the option to receive a new 25 year crediting period, and a commensurate extension of the permanence period.

Rationale: We note that Section 69 of the CFI Act allows a methodology to specify a crediting period for a sequestration offsets project. Consistent with recommendation 19 above, a new 25 year crediting period (with a matching new permanence period) for transition projects would:

Recognise that IFLM transition projects will be taking on additional carbon farming commitments;
Incentivise transition to IFLM, therefore harmonizing rules for earlier projects and later projects which would reduce administrative workload on the Regulator;
Be consistent with the new savanna burning methods, where a new crediting period has been recommended for transitioning projects;

- Align with the sequestration profile of most woody biomass regeneration projects, where sequestration is expected to occur well beyond the 25 year crediting period (and in many cases, for 100+ years); and

Better align the timeframe of transitioning projects with Australia's 2050 net zero goal;

Consents for transition projects

Recommendation 15: New eligible interest holder consents should be required for any transition project opting to a) take on new management changes and/or carbon pools; and b) receive a new crediting period/permanence period for the project.

Rationale: This is consistent with Recommendation 19, where Transition projects should be considered a new project, and as such under the CFI Rule they would be required to gain consent. These rules would be consistent with the new savanna burning methods, where consent is required to transition to the new method.

Recommendation 16: We support 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). These reforms should be implemented as soon as possible.

Rationale: The reformed process for consents on native title land should be finalised to prepare for a potential influx of transition projects under IFLM. We support revised consent requirements in the CFI Act that are aligned with the two-step process in the Nature Repair Act legislation.

The initial consent in the two-step consent process could include consent to transition to IFLM. The second and final consent would be required prior to submission of the first offsets report under the new method. We do not support a single-step consent process which can undermine rather than strengthen free, prior, informed and continuing consent processes, as this would require consent to occur before full information about the project is known.

Participation from Rural and Remote Communities and First Nations Australians

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

A. No. Participation is restricted under the method in four main ways: 1. Commercial viability; 2. The requirement to transition to forest cover within 15 years, which excludes the majority of the indigenous estate and some rangelands regions; 3. The failure to include a soil carbon module in the first draft of the method, which excludes participation in higher rainfall areas that are more amendable to soil carbon sequestration; and 4. The narrow range of management activities included in the first draft of the method.

Data sharing and transparency

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?*

Recommendation 17: Data sharing arrangements should be achieved via a Federally coordinated, decentralised environmental and land data sharing system, supported by a national data discovery portal and robust governance standards.

Rationale: Carbon farming projects generate extensive environmental, carbon, and land management data over decades, offering significant opportunities to improve national information and monitoring systems, support research, and inform land management decisions. However, data sharing must address legal, ethical, and technological considerations to protect privacy and livelihoods. A common data sharing framework with Federal governance will ensure integrity, interoperability, and appropriate use, while enabling insights across carbon, biodiversity, water, and agriculture sectors, that cannot otherwise be achieved through disconnected systems. This approach aligns with recommendations from the Independent ACCU Review and EPBC Act Review for a Federal data custodian role.

It is not appropriate to embed scheme data sharing arrangements into an individual carbon farming method. Rather such arrangements should be handled via scheme-wide carbon farming legislation and the national land database.

Appendix 1 outlines some recommended design features of the national land database. Despite being accepted by the Australian Government as part of multiple reviews, the establishment of a national database has lagged and this continues to create challenges in enhancing information transparency. Addressing this standing commitment should be appropriately resourced and prioritised. ***We are deeply disappointed that this issue was again not addressed or actioned in any meaningful way in the recently released Reforming the ACCU Scheme: Progress Update.***

Avoided clearing method

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).*

Previous recommendations on this topic:

Recommendation 18: Include structural placeholders in the method to accommodate the future addition of an avoided clearing module, and if possible, avoided emissions modules.

Rationale: Climate Friendly supports the development of a standalone Improved Avoided Clearing of Native Regrowth (IACNR) method that is focused on avoided clearing, as defined in the expression of interest. We will continue to actively participate in consultations run by the Queensland Government as they develop the method.

The IACNR method should be made as a standalone method, and as a module under IFLM. The IFLM should be amended to ensure it contains the necessary architecture to receive the IACNR method as a module.

Consistent with recommendation 18, standalone methods that are mirrored in the IFLM method should continue to be maintained and open to new project applications on a standalone basis. This rule should be applied to the forthcoming IACNR method, as for EP and soil.

We are however highly concerned by the regeneration approaches in the draft IACNR method as recently consulted on, which do not appear technically viable of implementation due to their prescriptive and complex nature, risk unduly counting pre-existing forest as part of progress checks and appear to rely on inappropriate models. As they stand, we do not believe the regeneration aspects of the IACNR meet the OIS.

Proliferation of integrated methods

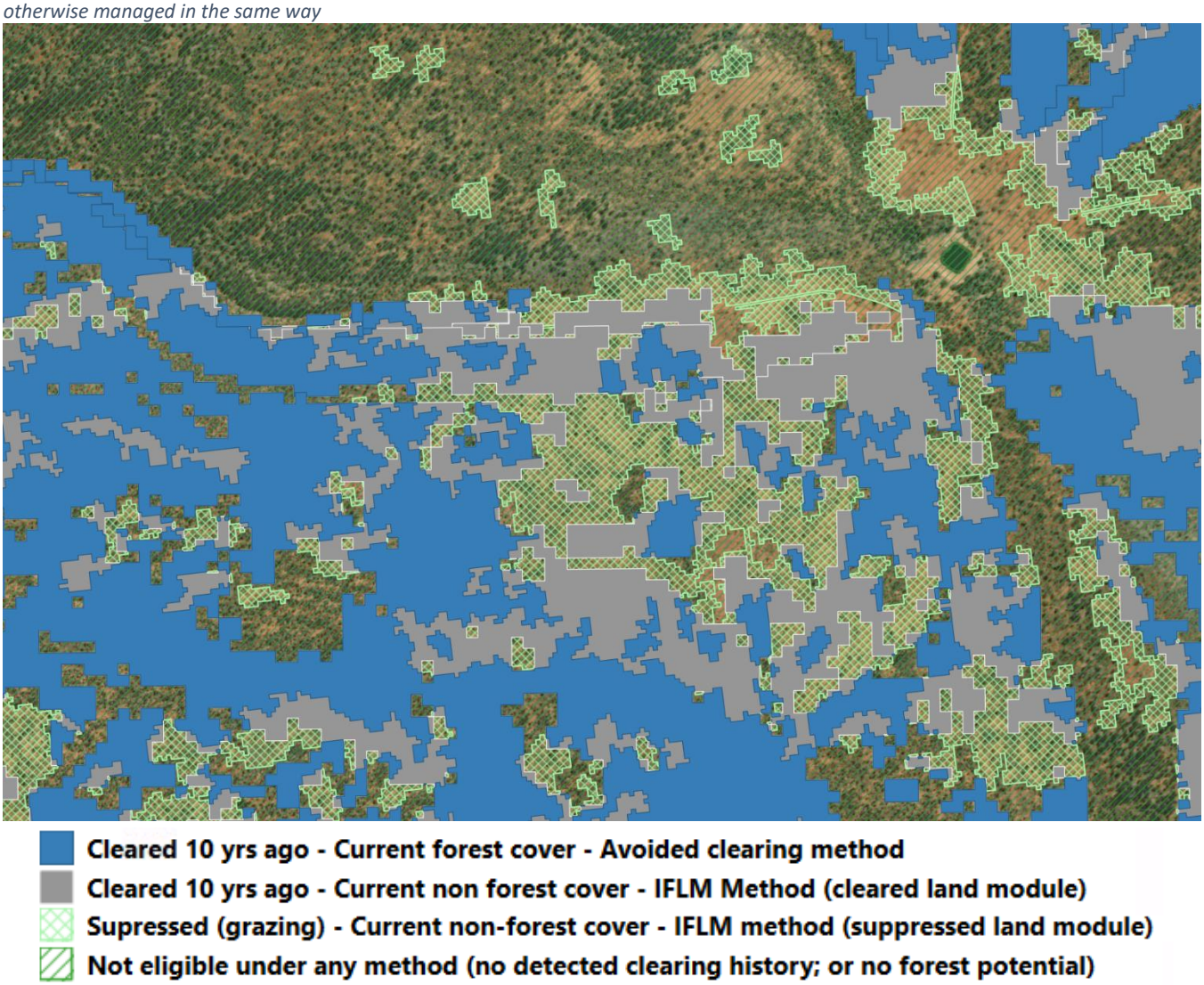
New recommendations on this topic:

Recommendation 19: **The avoided clearing method should be created as a standalone method, and as a module of IFLM.**

Recommendation 20: Consolidate a single land sector modular framework, with IFLM as the central integrated method.

Given that natural regeneration activities on cleared and supressed land typically occur side-by-side on the same property, it is highly likely that IFLM and Avoided Clearing activities would occur on similarly managed land within close proximity. Figure 66 shows a 500ha sample area on a property located near Bollon in Queensland, providing an example of how the mosaic of different methods and modules could be applicable to one part of one property.

Figure 6 Example area in Queensland (~500 ha) showing a mosaic of method/module eligibility, on land within close proximity that is otherwise managed in the same way



In this context, we agree that it makes sense for avoided clearing to be part of an integrated method. However, IFLM should be the primary multi-method framework rather than having two different methods with different rules for eligibility and accounting related to regeneration. The proposal to make IACNR another multi-method framework for the land sector would create confusion in the market due to a proliferation of multi-method frameworks. It could create potential for gaming different methods, would be difficult for the CER to administer with consistency, and create challenges for land managers in determining whether and how to participate.

ERAC should support a singular multi-method framework for the land sector being IFLM, and make the IACNR as a standalone method, and as a module under IFLM. This would be consistent with the original method Expression of Interest for the IACNR, which was to create a standalone avoided clearing method[8]

[8] The Expression of Interest for the IACNR method is available here: https://www.qld.gov.au/__data/assets/pdf_file/0025/560806/iacnr-method-eoi.pdf Section 10.1 of the EOI states that regeneration was not part of the original scope, but could be added later if prioritised.

Impact of recent reforms to the EPBC Act

Recommendation 21: Review method settings and seek formal advice in light of the recent EPBC reforms

Rationale: The IACNR method targets land comprehensively cleared for agriculture prior to 1 January 2025. However, recent reforms to the EPBC Act might now protect older regrowth (cleared 15+ years ago) regardless of whether a carbon project exists. The practical consequence is that the legally valid window for re-clearing may be much narrower than specified in the method. This has implications for a) eligibility and additionality of large parts of agricultural land; b) baseline modelling assumptions; and c) legal right to clear.

Regarding legal right, for a project to be eligible the land manager would need to self-assess eligibility of the clearing, and potentially also go through the EPBC Act referral process to determine if the clearing could impact any matters protected under the EPBC Act. If an EPBC Act permit was granted, the land manager would then decide to remove that right in order to implement the carbon project. This sets up the legal right situation for an unusual and potentially expensive process before receiving clarity on project eligibility. We note that the process for both approvals and exemptions is in the early stages of implementation, and it is currently difficult to assess the impacts of this new policy environment on the method.

Test modelling outcomes to determine primary abatement mechanism

Recommendation 22: **Test modelling outcomes from draft the Avoided Clearing method, to determine if the abatement opportunity is predominantly sequestration, or avoided loss of sequestered carbon.**

Rationale: When taking into account the method rules, the newly revised EPBC Act (which potentially complicate or limit eligibility for clearing of land, unless it has been cleared in the past 15 years), and potentially also Section 20AA of the CFI Rule, it appears likely that the primary abatement mechanism for the IACNR method is sequestration, not avoided emissions. This is because the eligible clearing window for this method is land that is "cleared between 1 and 14 years ago" or land “cleared between 7 and 14 years ago” if Section 20AA applies. Most ecosystems that were cleared between this timeframe are at the relative beginning of their sequestration potential (i.e. they are a long way from achieving Maximum Aboveground Biomass in FullCAM).

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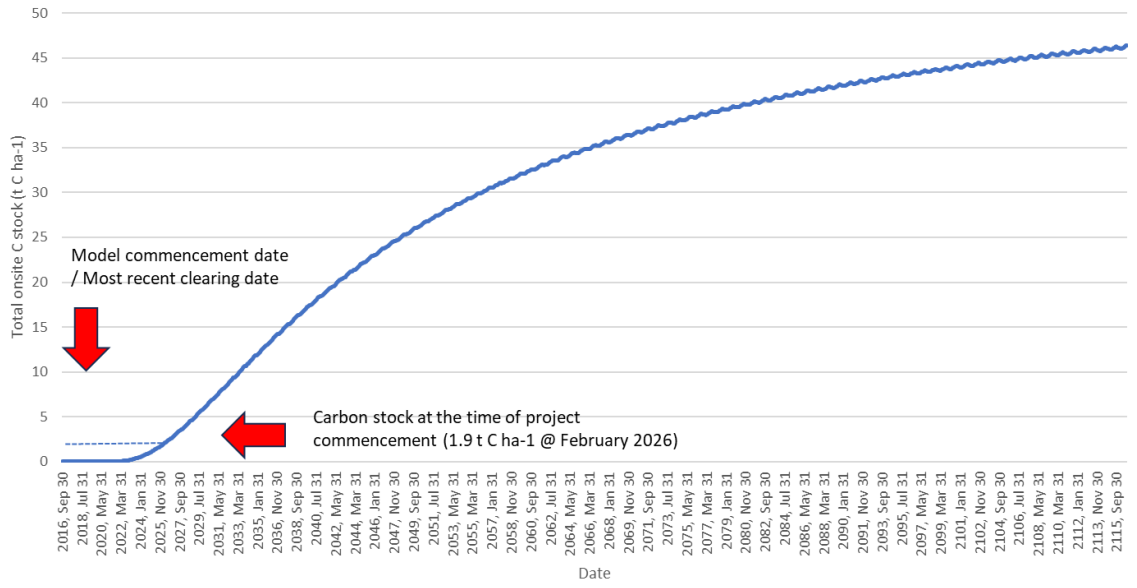
For example, refer to FullCAM modelling for a site located in Queensland with a Maximum Aboveground Biomass of 70 t dm ha-1 (Figure 7). This is the same site depicted in Figure 6 with a mosaic of eligible CEAs under the IACNR method and under the IFLM method. The site is typical of the broader region. The FullCAM modelling shown in Figure is for an area that was cleared ten years ago (i.e. In 2016). The carbon stock at the time of project commencement (assumed to be February 2026) is only 1.9 t C ha-1, which is only 4% of the carbon stock at 100 years, or 7% of the carbon stock at the end of the 25-year crediting period. This demonstrates that the magnitude of avoided loss of sequestered carbon for typical projects will be relatively small, compared with the magnitude of carbon that might be sequestered due to the decision to cease clearing. Whilst this site represents only one example, testing of other sites should be conducted (including sites with higher FPI values) to determine the proportions of sequestration vs avoided emissions.

Figure 7 FullCAM modelling of a project located in Queensland that was cleared ten years ago.



Harmonise historical clearing periods

The different historical clearing time periods applied in IFLM (15 years) and IANCR (25 years) could also be problematic. Figure 2 shows the effect of different temporal assumptions on clearing eligibility. These cut-offs are arbitrary, and risk creating inequities between neighbouring properties, undermining community trust in the scheme. It also creates a situation where land managers might result in gaming, with proponents "shopping around" for the method delivering highest abatement, which creates an integrity risk. Harmonisation of requirements and alignment with science-based rules and on-ground realities of carbon storage potential can best minimise this risk.

Restricted activities

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?*

The following variations to the draft method would significantly increase uptake and improve upfront clarity on eligible vs restricted activities.

Thinning

Recommendation 23: **For projects applying a measured approach, allow woody biomass thinning during the project period.**

Rationale: Many land managers perceive there is an opportunity cost associated with allocating land to trees. While many graziers understand the value of trees as shade and shelter for livestock, having "too many" trees is seen as reducing pasture production. Similarly, tight restrictions on vegetation management are seen as a loss of 'option value' of the land, resulting in reduced land valuations. This can create problems for loan-to-value ratios for land subject to a mortgage, and can be a serious barrier to the bank eligible interest holder consent process required for carbon farming projects. This perception of trees is a key barrier to uptake of vegetation-based carbon farming

projects. One way to overcome this barrier is to allow thinning of trees to achieve a more optimal tree-grass balance. This allows more sunlight to reach the pasture, and reduces moisture competition, allowing trees and pasture to co-exist. Under a measurement based approach, if carbon losses associated with thinning can be quantified, then thinning should be permitted. We support the development of a clear set of guidelines on how thinning can be conducted, and note there are already a number of high quality state based guidelines that could be drawn on or referenced.

Enrichment planting in regeneration CEAs

Recommendation 24: **For projects applying a measured approach, allow a more flexible configuration of planting and natural regeneration.**

Rationale: In some areas, there is a scattering of natural regeneration at a density that is insufficient to achieve forest cover. Under current method settings, it is proposed that the CEA cannot be transferred to become a planting CEA if uniformly sparse regeneration is ≥ 10% of the CEA. However, if proponents are using a measured approach, and the area is appropriately stratified, this distinction should not matter. Enrichment planting into such areas should be permitted, provided that the initial carbon stock is taken into account. This better enables land managers to undertake a flexible package of interventions to achieve the best carbon storage outcomes.

Clarify Section 20AA of the CFI Rule regarding re-clearing

Recommendation 25: **Revise or formally clarify Paragraph 20AA(1)(e) of the Carbon Farming Initiative Rule to reflect its original intent: preventing the replacement of intact, high-carbon native forests, and ensuring proponents do not benefit from clearing high-carbon vegetation.**

Rationale Some interpretations of Paragraph 20AA(1)(e) have drifted from its original purpose under Regulation 3.36 of the CFI Regulations (2011). Instead of targeting the protection of intact native forests, the legislation could inadvertently exclude projects that have undertaken re-clearing within the last five to seven years. This is problematic given these projects offer high additionality and significant abatement potential. This creates a narrow eligibility window for projects where the intended management change is avoided re-clearing. This undermines participation in carbon farming, particularly for projects that could deliver substantial climate and biodiversity benefits. Clarifying the rule will restore its intended focus, align with nature repair objectives, ensuring integrity without unnecessarily limiting project scope.

In drafting the IANCR method, we understand the Queensland Government was informed that paragraph 20AA did not apply to avoided clearing projects. We request that this advice is made public and specifically clarified in relation to projects using either the IANCR method, or the IFLM method.

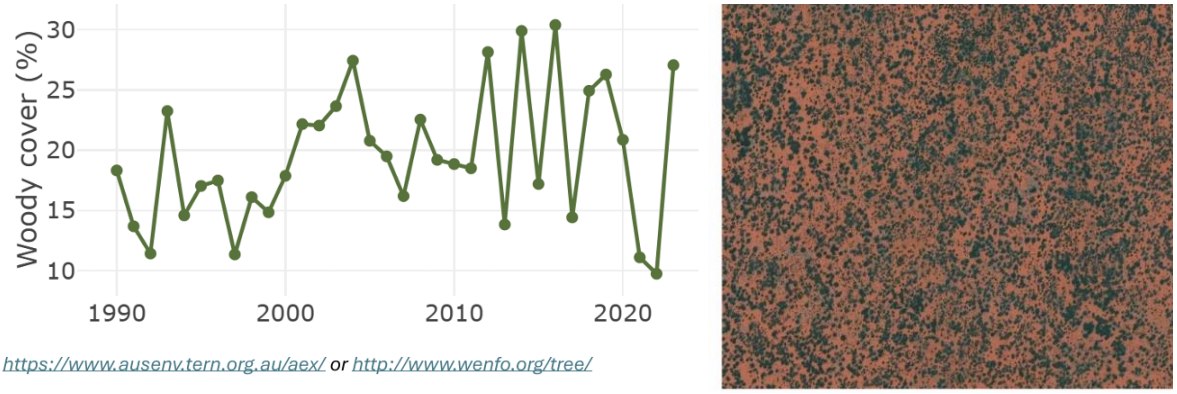
Impact of grazing / attribution

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.*

Is the range of method settings sufficient to ensure that any measured changes in woody vegetation are correctly attributed to changes in management practices?
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?
Will the range of method settings provide a conservative estimate of abatement?

The claim that woody vegetation in Australian rangelands merely fluctuates with rainfall (rather than in response to management changes), relies on a fundamental misidentification in some remotely sensed data: it confuses short-term signals in photosynthetic greenness (driven largely by grasses and leaf flush), with long-term changes in woody biomass (Figure 8). These are different phenomena operating on different timescales. Confusion of these two signals had led to a false conclusion by some that carbon stock in rangeland ecosystems is highly variable over short-term (3-10 year) time periods. However, tree trunks (where most of the woody carbon is stored) do not grow and shrink in this way.

Figure 8 (left) An example of the remotely sensed Woody Cover Fraction dataset from an arid ecosystem (north of Alice Springs, NT), showing unrealistic fluctuations in woody cover. (right) High resolution imagery of the same area in 2020, confirmed with local data to meet the definition of forest cover (20% canopy cover above 2m tall).



Source: https://www.ausenv.tern.org.au/aex/ or http://www.wenfo.org/tree/

Rainfall variability alone does not determine woody vegetation outcomes. If it did, grazed and ungrazed sites under the same rainfall regime should carry equivalent woody biomass. They do not. Globally, a standardised field survey across 98 dryland sites in 25 countries found that grazing pressure reduces carbon storage and increases erosion, with effects most pronounced in warmer drylands, characterising much of Australia's rangelands[10].

[10] 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

In Australian rangelands, the mechanism is well documented: the boom-bust cycle of pastoral economics creates a persistent ratchet mechanism of overstocking. When dry conditions arrive, falling livestock prices and rising feed costs create a financial imperative to maintain stocking rates that exceed carrying capacity[1112]. Livestock then consume less palatable vegetation, including saplings and shrubs. Multiple years of woody growth can be lost in a few short months. The effects of even a single failed recruitment event arising from overgrazing can persist for over a century[13]. Over decades, this leads to the systematic loss of mid-age-class trees, that cannot be explained by rainfall variability.

Many Australian pastoral stations have experienced continuous suppression since settlement, leading to persistent and material carbon stock deficits relative to ungrazed or remnant ecosystems[14], even in areas that have never been detected as "forest" or "cleared" in satellite imagery. Remote sensing alone is insufficient to describe the cumulative impact of 150+ years of pastoralism.

To link changes in woody carbon stock to grazing management, we support the multiple lines of evidence approach where a combination of data sources can be supplied, and in particular:

The Land Management Strategy (LMS), which requires proponents to articulate how suppressors have prevented regeneration and how project activities will address them.
The use of ecological evidence (missing age cohorts, degraded ground cover, soil condition) to document the long-term impact of grazing as a suppressor.
Evidence that vegetation condition has been flat or declining over a 20-year baseline period, combined with proactive elimination of alternative explanations (e.g., fire response).
The gateway requirement to demonstrate a material increase in woody carbon stocks, in contrast to trends over the baseline period.

These settings, taken together, establish through multiple lines of evidence that recovery would not occur without intervention. The case is further strengthened where candidate Carbon Estimation Areas can be compared to ecologically matched reference sites (or expert-derived ecosystem benchmarks) that differ primarily in management history, and where mechanistic models link population dynamics to current condition.

Through the CMI ILFM Taskforce, we have previously provided literature reviews to the Department, providing a wealth of evidence supporting the impact of grazing on woody biomass carbon stocks.

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[11]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
[12]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.
[13]Tiver, F., & Andrew, M. H. (1997). Relative effects of herbivory by sheep, rabbits, goats and kangaroos on recruitment and regeneration of sh rubs and trees in eastern south Australia. *The Journal of Applied Ecology*, *34*(4), 903. https://doi.org/10.2307/2405281
[14] 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

Discounting and conservativeness

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.*

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

Previous recommendations on this topic:

Recommendation 4: Where projects apply a measurement using multi-phase sampling approach, remove excessive discounts and the requirement to attain forest cover

The TYF discount approach is no longer appropriate and should be removed. It should be replaced with the probability of exceedance approach.

The attribution discount should be removed because attribution is already achieved via other method settings.

Rationale:

As described in Section 1 Priority Reforms, the range of discounts applied in the method, particularly for regeneration activities on supressed lands are excessive. The compounding effect of the discounts appears to contradict the second objective of the CFI Act, which is to "create incentives for people to carry on certain offsets projects." In addition, it is unclear how the discounting approaches are aligned with the OIS that methodologies must be "supported by clear and convincing evidence." The full list of discounts applied for regeneration projects on supressed lands, and their stated purpose is provided (Table 3).

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Stated purpose & discount approach	Feedback on proposed approach
Attribution discount	
Stated purpose: • "To manage uncertainty in attributing carbon stock changes to management before forest cover is attained" **Discount approach:** • Discount decreases as a CEA progresses towards forest cover. • Discount is higher in low rainfall areas (<500mm rainfall, ranging from 25% - 5%) than low rainfall areas (5%), as a proxy for higher potential inter-annual variability between wet and dry periods. • ACCUs withheld in previous reporting periods are returned once each canopy cover threshold is demonstrated.	• Does not achieve stated aim of attribution. Instead, the attribution risk is achieved via other safeguards already in the method, such as o the extended baseline period requiring flat or declining vegetation condition (20yrs); and o the requirement to measure carbon stock change (and issuance of ACCUs only if recording a durable carbon stock increase) • The method could strengthen some of the existing requirements to better achieve attribution. These could include: Clarify that gateways require demonstration of forest cover change, rather than static thresholds (draft text is the method is currently unclear as to whether gateways are static or change-based, we support change-based); and o As part of initial eligibility assessment, proactively demonstrate that there isn't recovery from a disturbance. • The structure of the attribution discount appears designed to manage forest cover attainment risk (i.e. similar purpose to gateways) For projects using the measurement based approach, the risk of forest cover attainment could be better managed by removing the requirement to attain forest cover, and instead requiring demonstration of *progress* towards forest cover (achieved via change-based gateways). • We agree that the rate of forest attainment is slower in low rainfall areas, as shown in Forrester et al (2025) who found that ecosystems receiving less than 300mm of annual rainfall required longer to demonstrate a statistically significant change in biomass after grazing exclusion. We agree that lower rainfall areas experience strong fluctuations in groundcover, and this is frequently picked up in satellite-based products. However, the draft method appears to conflate fluctuations in greenness with fluctuations in woody biomass (Figure) • The evidence basis for higher inter-annual variability in low rainfall regions between wet and dry periods should be provided. In our experience, the interannual variability on carbon stocks can be greater in higher rainfall areas. • We understand that low rainfall ecosystems can experience dieback during droughts, however except in extreme circumstances, such areas tend to be relatively isolated patches, and any carbon stock regressions can be measured.
Tree Yield Formula (TYF) discount	
Stated purpose: • To account for measurement, sampling and calibration uncertainty **Discount approach:** • Compares carbon stocks between plot measurements and FullCAM forecasts	• The ability to forecast (i.e. project carbon stocks forward in time) should be removed from the method. This will reduce or remove the requirement for the TYF discount. This change would reflect Schedule 2 of the 2021 Soil Carbon method, which does not allow for forecasts, only maps of current soil carbon stock that are validated using measurements. • If forecasts are removed from the method, the more appropriate statistic in the method would be Probability of Exceedance (similar to Schedule 2 soil) rather than they TYF discount.

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Stated purpose & discount approach	Feedback on proposed approach
• 40% of credits estimated from the TYF are withheld until the Lins Correlation Concordance Coefficient demonstrates a strong correlation with FullCAM at year 25 • Measured values are not used to estimate project carbon stocks but recalibrate the TYF from year 10 after project commencement	
Probability of exceedance (proposed by Climate Friendly & CMI IFLM Taskforce instead of TYF discount)	
Stated purpose: • To account for measurement and sampling uncertainty **Discount approach:** • Compares estimated carbon stock at two timepoints, accounting for uncertainty in each estimate. • Change in carbon stock is discounted proportionately to the measurement and sampling error – the T1 carbon stock estimate must be greater than the T0 carbon stock with at least 60% confidence, given the paired uncertainties. • When using multi-phase sampling across a portfolio of projects, the uncertainty of unmeasured projects is inflated proportionally to the agreement between the spatial extrapolation and the high accuracy validation measurements.	• Adopting multi-phase sampling, as described in Schedule 2 of the Soil Carbon method, provides a cost-effective means for spatially explicit carbon stock estimates with ongoing validation (i.e. 'measure-measure-measure'). • Using the probability of exceedance to discount change proportionally to measurement and sampling error gives proponents the flexibility to manage sampling costs. Discounting can be reduced by investing in more sampling but less sampling might be required where there are large and obvious changes. • The uncertainty inflation of the multiphase approach is a conservative way to share sampling costs across multiple projects while providing regular, validated updates of carbon stock change. Inflation is lowest in CEAs where the extrapolation matches validation measurement, incentivising proponents to stratify their validation groups carefully.

ACCU scheme buffer rules

***Recommendation 26: Scheme buffer operating rules should be clarified. The Scheme* buffer should be 'issued' and managed by the Australian Government as a non-tradable credit type.**

Rationale: The Scheme risk (5%) and permanence (20%) buffers play a central role in ensuring the environmental integrity of issued ACCUs. However, the current lack of clarity on buffer operating rules, including when and how cancellations occur (e.g., in force majeure situations), creates uncertainty for project proponents, investors, and the broader market. Scheme-wide, the size of these buffers already withheld from projects is in the tens of millions of ACCUs, but this important integrity measure is not currently being appropriately used, accounted for and reported on transparently by the Australian Government.

Clarifying these rules would:

- Enhance predictability and trust: Clear guidance on buffer management reduces perceived regulatory risk and supports informed investment decisions.

Strengthen accountability: Transparent processes ensure that buffer use aligns with the Scheme's objectives and avoids unintended consequences, such as over- or under-compensation for reversals.

Improve governance and auditability: Explicit rules enable better oversight and reduce the risk of inconsistent application.

- Support market efficiency: Considering whether buffers should be represented as a non-tradable credit type would improve visibility of the Scheme's risk management approach without distorting supply-demand dynamics for tradable ACCUs.

Leakage

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.*

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

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Previous recommendations on this topic

Recommendation 7: Amend the leakage provisions in response to new clearing controls introduced under the recently reformed EPBC Act

Conduct a review of the EPBC Act to assess whether it adequately addresses risk of clearing displacement, without the need to specific leakage management measures in the method.

If the EPBC Act is considered insufficient to address leakage concerns, leakage should only be triggered if clearing rates in the Vegetation Accounting Area (VAA) exceed historical clearing rates.

The extent of the Vegetation Accounting Area should be risk-based, limited to parts of the enterprise within the same region or state, or only to jurisdictions where clearing is permitted.

Rationale: The CMI IFLM Taskforce conducted work on leakage risk under IFLM[15] and found that displacement of clearing risk to be the major risk factor. On this basis, we agree with the draft approach to focus on clearing risk only.

For a more in-depth discussion of our positions on leakage, refer to our response under Key Issue 7.

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

No. Refer to our response under Key Issue 7.

CFI Mapping Guidelines

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.*

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

Recommendation 27: The method should articulate a requirement for consultation and ERAC advice for updates to Technical Guidelines that materially affect abatement.

A. We welcome the harmonisation of mapping processes for cross-cutting steps across methods. We support the inclusion of technical parameters in more nimble policy instruments such as Technical Guidelines, which we expect will be updated from time to time. However, material changes could cause uncertainty and economic risk for long-term projects. For example, parameters (such as root:shoot ratios) and processes (such as lidar calibration), could be

[15] Refer to Section 2.4 of the CMI IFLM Taskforce Expert Workshop discussion paper: https://carbonmarketinstitute.org/app/uploads/2024/05/IFLM-Method-Discussion-Paper-CMI-TF.pdf

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described in accompanying Technical Guidance Documents such as the CFI Mapping Guidelines or FullCAM Guidelines.

The processes and parameters in supporting guidelines can have a material impact on abatement. Hard-coding consultation requirements into the method will ensure changes are evidence-based and transparent. For example, previous new model releases for the public version of FullCAM have been prepared with inadequate consultation on property level impacts. A mandatory consultation requirement would prevent this from occurring again.

Landscape Rehydration

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

Are restrictions required to ensure hydrological management does not lead to leakage or adverse impacts on broader landscape hydrology?
Are any of these concerns managed through existing regulatory requirements?

A. Landscape rehydration slows runoff, increases soil moisture, and rebuilds soil structure—conditions that directly support vegetation recovery and soil carbon accumulation. Rehydrated landscapes typically show improved plant productivity, greater root biomass, higher organic carbon formation, and reduced erosion.

Including rehydration as an activity that can be undertaken as part of a regeneration module provides a strong pathway for long-term sequestration and permanence, particularly in degraded or drought-affected systems. Rehydration practices (e.g., leaky weirs, contour structures, gully repairs, wetland reconnection) also deliver well-documented co-benefits such as improved habitat, reduced sediment and nutrient loss, and greater drought resilience.

These practices align closely with First Nations land-management approaches that prioritise the slowing and spreading of water, supporting Indigenous-led project design, cultural restoration, and local employment.

Rehydrated landscapes often improve agricultural productivity through higher groundcover, better infiltration and nutrient cycling, and reduced erosion-repair costs—enhancing project viability and encouraging landholder uptake.

Key risks include potential unintended hydrological impacts, such as changes to downstream flows, altered flow paths affecting neighbours, or waterlogging in unsuitable soils.

We support the development of clear guidelines on how these activities can be undertaken to ensure there are no perverse consequences of landscape rehydration activities and note they should be fully compliant with any other existing regulatory requirements.

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Measure-Model approach, TYF & uncertainty discounting

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.*

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?

Refer to Section 2 for our response to this question.

Are disturbance events appropriately accounted for in the proposed approach?

Refer to Section 2 for our response to this question.

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?

Refer to Section 2 for our response to this question.

Consistency when changing estimation approaches

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?

Recommendation 28: A process for retrospective back-calculation of abatement should be articulated in separate Guidelines, in the event that the project changes sampling approaches.

Rationale:

Consistency between measurement intervals is essential. Observed changes in carbon stock must reflect real changes on the ground, not differences in sensors, algorithms, or processing methods between time points. Method guidelines should specify requirements for consistency in measurement approach across intervals, and where changes in technology or method are warranted, require retrospective back-calculation of historical abatement to ensure that the transition does not introduce bias. This approach is consistent with IPCC recommendations.

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Direct biomass measurement

- 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?

Previous recommendations on this topic:

Recommendation 3: Remove the requirement to use FullCAM under the hybrid approach, and adopt a measurement-using multi-phase sampling approach instead

Rationale:

This is the core of our position and is addressed in detail in Section 2.

Multi-phase sampling enables more frequent crediting and more regular validation than proposed for the Hybrid approach. The biomass map must be updated and revalidated at each reporting interval. Where validation is shared across projects within a region, the cost of regular remeasurement is distributed, making annual or biennial periods practical. These are established methods with well-understood statistical properties, already in use in forest inventory and carbon accounting in Australia and internationally. The method has an opportunity to adopt proven measurement approaches now, rather than embedding a forecast-dependent framework that defers accurate accounting to year 25.

A measurement-based approach meets the Offsets Integrity Standards more directly than a forecast-dependent approach. Carbon stock change is derived from validated measurements, not model output, making it measurable in the most literal sense. The measurements, statistical methods, and biomass maps that underpin each crediting decision are independently reviewable, satisfying the verifiable and evidence-based standards. Credited abatement comes from above-ground biomass, below-ground biomass, and debris pools, all of which are accounted for under the Paris Agreement. ERAC has interpreted that the eligible carbon abatement standard requires crediting from pools that Australia accounts for but does not require methods to use the same approaches as the National Inventory.

Measurement also strengthens the case for additionality. Where carbon stocks were static or declining for an extended period and increase only after project activities are implemented, the link between the project and the abatement is direct and observable. This is stronger evidence of additionality than a modelled growth curve that assumes change from the outset. The conservative standard is met through probability of exceedance (see Section 2), which provides a quantified, transparent mechanism for managing uncertainty that scales with data quality. This is a targeted form of conservatism, applied to each crediting decision, rather than a flat 40% discount applied to compensate for model risk and an additional 5 – 25% withholding based on reaching arbitrary canopy cover thresholds.

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

Previous recommendations on this topic:

Recommendation 7: Extend the "measurement using multi-phase sampling" approach to all current and forthcoming vegetation modules in the IFLM method

Refer to our response under Key issue 6.

Disturbance

- Are disturbance events appropriately accounted for in the proposed approach?

Refer to our response under Section 2.

Qualified person / Land management strategy

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?*

Recommendation 29: The qualified person definition should be supported by guidelines that provide a clear framework for demonstrating eligibility under both pathways, with the Indigenous traditional knowledge pathway at 22(9)(b) developed in consultation with First Nations communities and representative bodies.

Recommendation 30: The method should allow for team-based assessment of the land management strategy, where a qualified person works alongside land managers or First Nations knowledge holders whose site-specific expertise informs the assessment.

Rationale:

The land management strategy is an essential component of the method. The qualified person requirement must balance integrity with accessibility and inclusion of all relevant scientific and cultural knowledge.

The inclusion of Indigenous traditional knowledge as a standalone pathway is welcome. However, the guidelines that support this pathway must be designed to protect Indigenous intellectual property and cultural knowledge, and must avoid imposing Western credentialing frameworks as the standard against which traditional knowledge is assessed. A two-eyed seeing approach, where Indigenous and Western knowledge systems are treated as complementary rather than one validating the other, should inform how guidelines are developed and how team-based assessments are conducted in practice.

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A team-based model would also strengthen the LMS more broadly. Land managers hold site-specific knowledge of suppression history, management activities, and ecological trajectory that is directly relevant to the assessment. The qualified person retains responsibility for sign-off, but the assessment is better informed via the team input.

A practical concern is cost and availability in remote areas. The site visit requirement combined with 5-yearly and 10-yearly review cycles creates a recurring cost over the life of the project. The method determination should prescribe the outcomes a qualified person assessment must achieve (e.g. confirming eligibility, verifying management activities, assessing ecological trajectory), while guidelines should set out how those outcomes are met in practice. This includes a risk-based approach to review intensity: for example, a full site visit may be appropriate at registration and when issues are identified, while routine reviews of a well-performing project with a stable LMS may warrant a lighter-touch assessment. This would help manage cost and availability pressures without compromising the standard of assessment.

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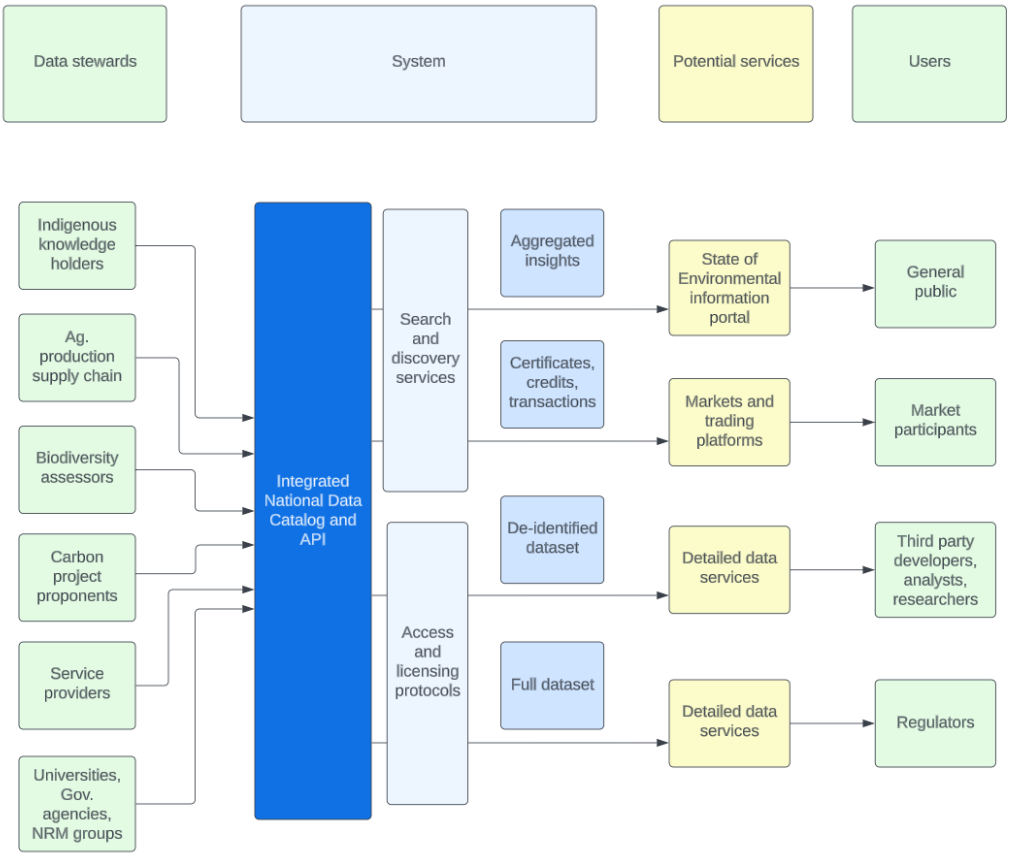
Appendix 1: The need for a national land database

Climate Friendly and our carbon farming partners collect an enormous amount of environmental, carbon and land management data, as part of our rigorous feasibility assessments when planning and implementing a land-based carbon farming project which can span a 35-year period. There is a significant opportunity to share this data to support ongoing research, continuous improvements of national carbon, environmental and agricultural monitoring systems; and to provide information to land managers to aid decisions on managing their property.

In the case of carbon farming projects, this data is tightly linked to privacy laws and the livelihoods of individual land managers. Therefore, there are careful legal, ethical and technological considerations in enabling access to this information which would provide multiple benefits while also protecting confidentiality.

Advances in data infrastructure technology mean it is now possible to develop a national land data platform with a data discovery portal. This would give access to agreements and usage licenses with private organisations or individuals able to opt-into sharing their information to achieve multiple environmental, carbon and agricultural benefits. Our proposed structure is to consider an adaptation of the National Water Data Hub[16] design. Figure 1 below outlines a potential structure for such a data sharing system for environmental and land data.

Figure 1: Environment and land information in a Federally coordinated decentralised system.



[16] Figure 5, *Water Market Reform Roadmap* (2022), Department of Climate Change, Energy, Environment & Water, accessible here: https://www.dcceew.gov.au/sites/default/files/documents/water-market-reform-final-roadmap-report.pdf

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While previous attempts have been made to create national systems, these have typically relied on traditional data sharing systems and structures which aim to centralise data within a single central location and IT system. Traditional systems have limitations and are unlikely to facilitate data sharing of the exponentially increasing volumes of environmental and land related data sources that are being collected by a wide range of stakeholders, including business, conservation organisations, universities, peak bodies and governments, on carbon, nature repair, water and agriculture production. Modern data sharing systems can be decentralised with data housed on multiple connected IT systems. A decentralised system provides a more flexible way of sharing information across multiple information sources. A decentralised system covering the proposed range of environment and land related information sources would enable information and analysis that could not be achieved within separate disconnected systems or using traditional data sharing approaches.

As environmental and land data systems in both the private and public sectors are proliferating, it is important to establish a common framework, standards and integrated technology platform for exchanging information. A decentralised environmental and land data sharing system will require strong Federal governance and interoperable standards to ensure data integrity and appropriate use. It will also be important to develop central Federal oversight of search and discovery capability, as opposed to the government building a large centralised traditional data repository. An information supply chain 'Custodian' for environmental data was recommended in the Independent Review of the EPBC Act as well as the Independent ACCU Review. This Custodian role could set these Federal standards for a common framework and standards for exchanging information and build search and discovery capability. The Custodian could also deliver access and licensing protocols for a variety of common users and use cases. Given similar functions currently performed by the ABS/ABARES, the ABS would be a good candidate to take on this function.

This short video helps explains how the database could work and how governments, conservation organisations and agricultural producers might all contribute information and obtain benefits.