

Dear Method Development Team,

On behalf of Forestry Australia, we wish to thank you for the opportunity to comment on the draft Integrated Farm Management Method. While supportive of the efforts to improve the options for generating abatement from the land sector, we are concerned with a number of elements of the draft method that may compromise the integrity of credits issued under the method, and warrant revision. The key issues are summarised below, but we would welcome the opportunity to discuss some elements in more detail. A key concern from Forestry Australia is the exclusion of for-harvest plantations on greenfield (previously non-forested) sites. As this is a sequestration activity with a simple baseline (zero), its inclusion would be relatively straightforward, and would unlock significant additional abatement, whilst supporting other Government objectives such as expansion of Australia's plantation estate.

In light of the concerns being raised on the base methods on which this method has been constructed (i.e. HIR), we are of the position that such integrity issues must be addressed rather than perpetuated or expanded upon. Some of the suggestions below address some of these integrity issues; however we are aware of the complexities of carbon projects and that there is a need to heavily scrutinise the solutions we provide to ensure all elements have been considered. In this regard, we strongly recommend not relying on voluntary processes such as this to identify problems and solutions in developing a method. It is recommended that relevant organisations or individuals be formally engaged to review options for ensuring additionality and measurement integrity of projects.

Kind regards,

Geoff Roberts

On behalf of the Forestry Australian Carbon Working Group

NB: The views presented within this document represent a range of views of the Forest Australia working group and are not attributable to an individual or the organisation that they work for.



Feedback template – Integrated Farm Management Method Co-Design Workshop 7 July 2022

If you would like to share your feedback with us, please send an email to methoddevelopment@cer.gov.au. The deadline for receiving feedback on the method and simple method guide is **31 July 2022**. Please note that the earlier we receive your feedback, the more likely we will be able to consider it.

Feedback item	Feedback
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Key concepts to consider – Baseline period:

What is an appropriate baseline period for regeneration projects to demonstrate that the project activity will result in additional abatement?

Simple Method Guide Reference

Section 1.2 – Key concepts to consider (p. 15)

Stakeholder feedback box (p. 17)

- In relation to regeneration projects, it is unclear how a baseline assessment of vegetation cover will work with persistent forest cover. It is recommended that there be wider consultation on **what** is being monitored over the baseline period, not just the period itself. In particular for forested areas, or land that has no forest potential (shrub lands).
 - If the method is expanding into non-forest woody vegetation, then the Land Management Strategy should be required to provide additional research and evidence that the CEA has additional sequestration potential and that a baseline assessment is a suitable mechanism for reviewing additionality.
 - The baseline assessment appears to be too simplistic for complex systems in identifying additionality.
 - It is recommended that an assessment of baseline conditions consider the impacts of natural and anthropogenic activities, and seek to differentiate between them.
 - It is recommended that consideration be given to monitoring forest condition and structure in determining the potential additionality of the project. This could be in line with a proposal put forward by Climate Friendly; noting the need to test this approach ensures non-additional abatement is excluded.
 - It is recommended that model-only approaches be restricted to lands that have previously had, or reasonably expected to have had, forest cover in the past and this be demonstrated at project registration (e.g. evidence of past clearing of forest). This recommendation is in addition to the baseline assessment, and may have a variety of sources of evidence, including aerial or satellite imagery.
 - We note that evidence requirements should increase with risk. That is, areas of high rainfall (>500mm) would have a different evidence requirement than areas of low rainfall.
- The method appears to be moving away from specified additionality tests to ‘Newness’ requirements. We note that while additional activities should be ‘new’, not all new activities are ‘additional’ (i.e they may have already been planned in the absence of the carbon project). It is recommended that there be clear links between the abatement that is credited and the specified activity, and only abatement attributable to the change in management be credited.
 - For example, vegetation will respond positively to rainfall events, which will also increase soil carbon stocks. Not appropriately accounting for climate driven events for vegetation or soil will result in crediting non-additional projects. The method must account for environmental factors, e.g. rainfall, that affect biomass and soil carbon stocks.
 - To account for the periodic nature of suppression and regeneration pulse events, the FullCAM only approach could include a ‘fluctuating baseline’ option (like in the current Native Forest from Managed Regrowth method) to accommodate significant parts of Australia where the regeneration is subject to ‘pulses’ of suppression and growth, such as locations where the regrowth is quite rapid.
 - The timespan being reviewed should reflect the expected timeframes for natural fluctuations.

Feedback item	Feedback
	<ul style="list-style-type: none"> ○ Presence of grazing is not evidence of the presence of suppression, rather the presence of an activity that <i>may</i> suppress regeneration. Further evidence is required of actual suppression. ○ In light of concerns raised on the integrity of existing methods, we recommend a precautionary approach to expanding rules to ensure rigor of the methods. ● As a comment, the method appears to be conflating the different purposes of a baseline: <ul style="list-style-type: none"> ○ Demonstrating new and additional baseline ○ Fossil Fuel & enteric fermentation emissions ○ Identify baseline forest baselines to demonstrate suppression of regeneration.
<p>Land eligibility requirements:</p> <p><i>Are the proposed eligibility requirements appropriate to ensure baseline carbon stocks are an accurate reflection of business-as-usual sequestration? Is there an alternative approach?</i></p> <p><u>Simple Method Guide Reference</u></p> <p><i>Section 1.3 – Land eligibility requirements (p. 18)</i></p> <p><i>Stakeholder feedback box (p. 20)</i></p>	<ul style="list-style-type: none"> ● The method assumes a static or declining baseline; however this may not be appropriate in many circumstances. Evidence of a stable or declining baseline is necessary. <ul style="list-style-type: none"> ○ One alternative approach could be BACI (Before After Control Impact) design, i.e. have Before and After measurements in Control (non-project) and Impact (project) areas. With the strong influence of rainfall and other environmental factors, we need a method to account for those factors. This could also be achieved by looking at ecologically comparable reference or target sites, mirroring the process under the ‘Accounting for Nature’ standard

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<p>Eligible management activities:</p> <ul style="list-style-type: none"> • We are seeking input if specific activities including but not limited to tillage practices should be excluded from the list of eligible management activities on the basis that they are already in wide-spread use across Australia and are therefore unlikely to be additional. • Do the proposed eligible management activities for Phase 1 of the draft IFM method create an appropriate framework for combining or ‘stacking’ multiple activities on the same property or aggregated properties that can be built on in Phase 2 of the method? • For the activities that are covered by existing methods, are there barriers to uptake in existing methods that could be addressed in the IFM method while still meeting the offsets integrity standards? • Is there an evidence base to support the inclusion of leucaena, saltbush and tagasaste in the IFM method? Are there other fodder planting species, which are supported by evidence? • Are there potential adverse environmental impacts that could result from planting certain fodder planting species, such as the spread of weeds? How could this risk be managed in the IFM method? <p>Simple Method Guide Reference</p> <p>Section 1.4 – Eligible management activities (p. 20)</p> <p>“Why is there a set list of eligible management activities?” box (p. 22)</p> <p>Stakeholder feedback box (p. 23)</p>	<ul style="list-style-type: none"> • There is currently no commercial tree planting option included in Phase 1 which in our view is an oversight. It is recommended that Greenfield Plantation Sites be incorporated into the eligible activities. <ul style="list-style-type: none"> ○ Recommend inclusion of harvest plantations in Phase 1, e.g. Farm Forestry method and/or Schedule 1 of Plantation Forestry method. These activity types would mesh with the existing IFM architecture and would therefore not introduce too much additional complexity into the draft Method. • There is not a strong link between the activity and the credited abatement. Under soil carbon, for example, increases in soil carbon stock driven by climate rather than management will be credited. We are of the position that naturally driven variation in carbon stock in soil or vegetation that occurs regardless of management should not be eligible abatement under the method. <ul style="list-style-type: none"> ○ Further review of the additionality tests is required to ensure that natural variation on carbon to stocks are accounted for. • In expanding the tree options, further consideration must be given to the permanence risks of these planting types. It is recommended that the permanence discounts be developed to reflect the risk of non-permanence of fodder trees or other new planting types, such as it currently applied for short rotation plantations in the Plantation Forestry method. • It is recommended that the CER developed internal reporting to local land services or equivalent on the presence of projects with any weed risks.

Feedback item	Feedback
<p>Restricted and prohibited activities:</p> <ul style="list-style-type: none"> • <i>Could additional activities be supported by more comprehensive inclusion of land within the control of the landholder such as requiring the project area to include all land within the property boundary? Should this requirement extend to all land owned or leased by the project proponent?</i> • <i>Is there a rationale for imposing restrictions on destocking of land to certain soil carbon CEAs when the same restrictions do not apply to the entire project area?</i> <p>Simple Method Guide Reference:</p> <p><i>Section 1.5 – Restricted and prohibited activities (p. 25)</i></p> <p><i>Stakeholder feedback box (p. 25; p. 27)</i></p>	<ul style="list-style-type: none"> • No comment
<p>Mapping your project area – Carbon estimation areas (CEAs):</p> <p><i>We are seeking scientific input on whether there are concerns with double-counting sequestration in overlapping soil and vegetation CEAs that are not addressed through the proposed equivalent soil mass approaches.</i></p> <p>Mapping your project area – Determine your project emissions:</p> <p><i>Beyond conducting soil and grazed fodder planting activities, are there other activities that could result in a change in livestock emissions?</i></p> <p>Simple Method Guide Reference</p> <p><i>Section 1.7 – Mapping your project area (p. 28)</i></p> <p><i>Stakeholder feedback box (p. 29; p. 31)</i></p>	<ul style="list-style-type: none"> • It may not be necessary for the method to explicitly detail how to exclude double counting, rather the method clearly stipulates that no carbon pool, or part thereof, can be double counted, and processes implemented by the proponent reflect this. • As a comment, the Guide incorrectly indicates that fine roots are an excluded carbon pool within vegetation projects. Coarse and Fine roots are both included under vegetation methods.

Feedback item	Feedback
<p>Baseline sampling:</p> <ul style="list-style-type: none"> • <i>Is the approach that baseline sampling occurs prior to commencing a vegetation activity appropriate? Are there alternative approaches that ensure integrity when accounting for changes in soil carbon from vegetation activities?</i> • <i>Is the approach to deduct previously issued credits appropriate for projects transitioning from a modelled to a hybrid or measurement-only approach? Are there alternative approaches that ensure integrity when baselining occurs after project commencement?</i> • <i>For vegetation implementation areas, once a hybrid or measurement-only approach has been used to estimate net abatement, it is not possible to use the FullCAM-only approach for a subsequent reporting period. Is this restriction appropriate in all circumstances?</i> <p>Simple Method Guide Reference</p> <p>Section 3.1 – Baseline sampling (p. 38)</p> <p>Stakeholder feedback box (p. 40)</p>	<ul style="list-style-type: none"> • We are supportive of deducting previously issued credits for projects transition between approaches, so long as the appropriate risk of reversal buffers and permanence discounts are also accounted for. • We are supportive that if there is a switch from model only to hybrid or measurements only, should not be allowed to switch back to model only approach, unless it is proven to be a conservative outcome. <ul style="list-style-type: none"> ○ We recommended that proponents can optionally report zero carbon stock change from a non-disturbed forest area without the need for implementing a measurement procedure.

Measurement-only and hybrid approaches to estimate sequestration in vegetation:

- For regeneration activities, it is proposed that any trees that are at least 1.3 metres tall at the time of baseline sampling must be considered non-project trees as these are unlikely to be impacted by the project. Is this approach suitable? Are there alternative metrics that could be used to identify non-project trees?
- For measurement under both approaches, a minimum of 9 sampling plots per CEA (a minimum of 3 sampling plots per strata) has been proposed to allow the variance of abatement estimates within a stratum to be calculated to inform abatement estimates for the project. Is this approach appropriate?

Simple Method Guide Reference

Section 3.2 – Measurement-only and hybrid approaches to estimate sequestration in vegetation (p. 41)

Stakeholder feedback box (p. 43)

- There are a number of issues with the proposed sampling approach which will need to be addressed. It is recommended that the sampling requirements be developed by a biometrician, or through consultation with a biometrician. The original Sampling Guidelines may be a useful resource for this. Forestry Australia is happy to provide some review processes on this on a voluntary basis; however to ensure that the sampling issues can be given appropriate consideration, it is recommended that an organisation with appropriate experience in forest inventory design be engaged on a consultancy basis to develop the guidelines.
 - A potential resource is the standard forestry inventory design (systematic sampling with a random start) as recommended in the Farm Forestry method. Design software freely available, e.g. <https://firs.com.au/>
 - Any engagement with an external organisation should consider the sampling methods already in place in measurements only and hybrid methods. This includes Measure-Model-Measure approaches for calibration of FullCAM previously proposed (but not included) under the Farm Forestry method. We are happy to supply a copy of the MMM approach on request.
- The stratification requirements are unnecessarily onerous for measurement based approaches, and do not allow for efficient inventory design. It is recommended that stratification requirements be developed for each measurement approach permitted under the method, rather than restricting projects to meet the specifics of one.
 - Measurement based methods should have different stratification requirements than the FullCAM based methods, similarly spatial implementations of FullCAM should have different requirements again.
 - It is recommended that point based FullCAM stratification centre on representing the underlying M layer and management events, as the chosen model point in FullCAM has significant impact on abatement, and has high potential for gaming.
 - It is recommended that for spatial implementations of FullCAM (maximum size pixel size of 0.0025 decimal degrees), each pixel must represent the underlying M layer and management event; however they do not have to form separate CEAs.
- Independent inventory requirements are not necessary where guidance is specific enough to ensure a demonstrably random sample.
- We do not support the requirement that sampling of woody biomass be conducted by an independent contractor. This is because relative to soil, woody biomass plots have much lower likelihood of being relocated (and therefore lower potential for gaming). Reasons for relocation of woody biomass plots are generally restricted to crew safety. We feel the requirement to send the Regulator plot locations in advance is sufficient. The existing requirement for independent sampling reduces the ability for organisations to control logistics of the field sampling operation, which is already a complex logistical operation given covid restrictions and inclement weather events.
- We also suggest that the sampling guidelines should be developed to be technology neutral, noting that some technologies such as LIDAR take measurements via a more extensive 'transect' as opposed to plots.
- The treatment of non-project trees is problematic. While we appreciate what is trying to be achieved with the non-project trees, the proposed mechanism will result in biased output (over crediting).

	<ul style="list-style-type: none"> ■ Stem density is not an appropriate measure for accounting for project trees. Using the mean stocking rate of non-project trees will, on average, include non-project trees in the sample. On average, project trees will also be excluded from the inventory. However, as non-project trees tend to be large compared to project trees, there will be over crediting with the current approach. Alternatives that could be considered are biomass based adjustments or diameter cut-offs. <ul style="list-style-type: none"> ● The 2014/15 proposed Woodlands restoration method included an approach for identifying non-project trees in random plot designs. ● We also believe that the proposal put forward by Climate Friendly for assessment of size class structure relative to a target state in order to assess historical suppression and future management change is worth review. This review must ensure that the method meets regulatory requirements, and appropriately excludes non-additional projects or projects with low likelihood of additionality. <ul style="list-style-type: none"> ○ We note that additionality discounts are never an appropriate mechanism for managing non-additional abatement. ● Guidance is required on how to account for belowground biomass and debris. ● The current Hybrid Approach is essentially a multi-phase sampling approach, rather than measure-model-measure approach. This may suit organisations with a large portfolio of projects, but represents a barrier for individual or small organisations with fewer projects. Through adopting a true measure-model-measure approach as described below, this could be overcome. We would be supportive of mechanisms that allow for annual crediting between measurements, either based on projected growth from equivalent PSPs or FullCAM (adjusted to ensure conservativeness). <ul style="list-style-type: none"> ■ Under this option proponents can opt to enter into a measure/model process where the initial carbon abatement is estimated with calibrated models, or FullCAM or FullCAM Equivalent models (e.g. year 0-5), followed by periodic (not more than 5 yearly) 'true-ups', and modelling within the intervening years. The modelling will be restricted to FullCAM or FullCAM equivalent models, or models that meet a calibration requirement, where the 'true up' involves the full measurement of reported CEAs. Where a measured outcome is less than what has been credited, crediting is paused until the modelled carbon is equal to or higher than what has previously been credited. Essentially the project credits get adjusted forward and backward along the FullCAM or other modelled curve. This will allow reporting without measurement, but reduces the risks with true ups. <ul style="list-style-type: none"> ● We note that different modelling approaches will have different levels of requirements for demonstrating compliance with the method. ■ We note that an earlier version of the Farm Forestry method (not approved) included guidelines for calibration of FullCAM using field measurements. This document was not included in the final Farm Forestry method, but it seems suitable in the case of MMM for IFM. We are happy to supply a copy of these calibration guidelines on request.
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Feedback item	Feedback
<p>FullCAM-only approach to estimate sequestration in vegetation from regeneration of native forest (with or without infill planting) and permanent environmental planting activities:</p> <ul style="list-style-type: none"> • We are seeking feedback on what datasets could be used to demonstrate progress in woody growth under a FullCAM-only approach for the pre-project (X years prior to registration) and crediting periods of projects (i.e., the data set must commence no later than 200X for a project registered in 2023). • The CER has proposed to extend the baseline period from 10 years to X years prior to the project. Does this pose implementation issues particularly with regards to remotely sensed data that may be available for this period? • The FullCAM-only approach is a simple alternative to the hybrid approach. In pursuit of simpler application, the facility to backdate modelling commencement dates, apply growth pauses and the requirement for initial carbon stock in precursor methods has been removed. Modelling commencement dates are to start when the project mechanism is implemented. Views are sought on this approach. <p>Simple Method Guide Reference</p> <p>Section 3.3 FullCAM-only approach to estimate sequestration in vegetation from regeneration of native forest and permanent environmental planting activities (p. 43)</p> <p>Stakeholder feedback box (p. 44)</p>	<ul style="list-style-type: none"> • In line with the methods used to calibrate FullCAM for human -induced regeneration, it is recommended that the FullCAM-only (and FullCAM equivalent) approach only be permitted where there is a single cohort being modelled from an immaterial baseline. We recommend a cohort being defined as regeneration that occurred within a single regeneration event and will occupy more than 95% of the maximum biomass potential of the site at maturity (i.e. less than 5% of M on site in non-project trees prior to project commencement). <ul style="list-style-type: none"> ○ It is recommended that the method clearly define a cohort for modelling purposes and the conditions for model only approaches. • Where Gateways are used to monitor progression of regeneration, it is recommended to clarify the treatment of non-project trees. This includes monitoring increases in canopy - rather than canopy extent. <ul style="list-style-type: none"> ○ For example, it appears that currently non-project trees contribute to the canopy gateways for HIR projects. If this occurs, a project could start with 18% canopy cover and pass the first three gateways without increasing the canopy cover. Such an outcome renders the threshold test redundant. • The method must be expanded to support FullCAM equivalent models, including spatially explicit versions such as FLINTpro. The current point based modelling approach results in bias at the CEA level, which can result in bias at the project level. This bias can be overcome by having a spatially explicit system that assesses every pixel within the CEA. <ul style="list-style-type: none"> ○ It is recommended that where the same results are generated as FullCAM following the Guidelines for any point within the CEA, the model should be accepted. ○ The project proponent should be required to demonstrate this by providing a plotted relationship of FullCAM outputs vs the FullCAM equivalent output. • To ensure the unbiased application of models, including FullCAM or FullCAM equivalent, it is recommended that FullCAM should still have a reconciliation process, i.e. some simple measurements to indicate that the carbon stocks (or abatement) obtained on a project is remotely near the FullCAM estimates. Other accreditation schemes that allow model estimates require reconciliation measurements, e.g. Gold Standard. • If regeneration commenced prior to project commencement, additional levels of scrutiny regarding the additionality of the activity should be required. This could include evidence of the periodic nature of regeneration and subsequent suppression cycles.

Feedback item	Feedback
<p>Measurement-only and hybrid approaches to estimate sequestration in soil:</p> <ul style="list-style-type: none"> • Have there been scientific advances since the development of the 2021 soil carbon method to support a model-only approach for soil carbon accounting for the draft IFM method? • Are there any improvements that could be made to the measurement-only and hybrid approaches in the 2021 soil carbon method for the IFM method that maintain integrity? <p>Simple Method Guide Reference</p> <p>Section 3.4 – Measurement-only and hybrid approaches to estimate sequestration in soil (p. 45)</p> <p>Stakeholder feedback box (p. 46)</p>	<ul style="list-style-type: none"> • It is recommended that only abatement that is attributable to the additional management action be credited, and that the calculations be adjusted to reflect this. This would require excluding the influence of climate and pre-project activities on the soil carbon pools. This could be achieved through providing evidence of an empirical process based model that demonstrates that in the absence of the management activity the carbon stock would not have
<p>Additional feedback on the draft IFM simple method guide and draft method</p>	<p>Broader consideration could be given to a hybrid (measurement and model) approach for vegetation as follows</p> <ol style="list-style-type: none"> 1. Measure AGB only through carbon inventory. If allow use of published allometrics (e.g. CER approved list) this would be a simple process. 2. Use calibrated FullCAM to estimate other carbon pools (roots, debris, forest products if harvest) and emissions (fuel, fire) calibrated from the AGB measurements. e.g. Farm Forestry method allows this approach for root biomass from AGB (root:shoot ratio obtained from FullCAM).