## Interim operational policy—stratification of carbon estimation areas under the NFMR and HIR methods

The native forest from managed regrowth (NFMR) and human induced regeneration (HIR) family of methods are designed to achieve forest cover of Australian native tree species that are indigenous to a project’s local area through regeneration. It is expected that areas with forest potential can and should reach forest cover by the end of the crediting period for the project.

The purpose of this policy is to clarify requirements for stratifying carbon estimation areas (CEAs) under the NFMR and HIR methods, including the requirement that a CEA must have forest potential when it is first stratified, and that it demonstrates regeneration during each subsequent reporting period[[1]](#footnote-1).

Stratification refers to defining the boundaries of a CEA—which is an area of land within a project area where the project activity or activities are being carried out, and for which you expect to receive credits.

Initial stratification of a CEA requires that the land must have forest potential and be a minimum area of 0.2 hectares. For a CEA to have forest potential, it must contain trees across the CEA and the trees must be of a type that are likely to reach two metres or more in height and at least 20 per cent crown cover over the area of the CEA[[2]](#footnote-2).

For NFMR projects, the minimum tree stem density required to achieve 20 per cent crown cover for a given crown diameter is set out in the table below.

*Table 1—Minimum number of trees per hectare to achieve 20% crown cover in a stand of trees*

|  |  |  |  |
| --- | --- | --- | --- |
| Mature crown diameter per tree (m) | Crown area per tree at maturity (m2) | Crown area per tree at maturity (ha) | Minimum number of trees per hectare required for 20% crown cover\* |
| 5.0 | 19.63 | 0.00196 | 102 |
| 4.5 | 15.90 | 0.00159 | 126 |
| 4.0 | 12.57 | 0.00126 | 160 |
| 3.5 | 9.62 | 0.00096 | 208 |
| 3.0 | 7.07 | 0.00071 | 283 |
| 2.5 | 4.91 | 0.00049 | 408 |
| 2.0 | 3.14 | 0.00031 | 637 |

\*Crown cover of 20 per cent divided by crown area per tree at maturity.

CEAs should be selected according to the site characteristics and management practices that affect the growth rate of trees in the area. It is not sufficient that a CEA was once vegetated or forest—the CEA must have trees regrowing that meet the requirements outlined above to have forest potential[[3]](#footnote-3).

All Emissions Reduction Fund methods include rules about which areas of land can be included in, or must be excluded from, a CEA. For HIR projects, the boundary of each CEA must be no further than two metres from a tree stem. Both HIR and NFMR methods also require re-stratification of CEAs when circumstances change.

Under the HIR method, a CEA may need to be re-stratified at the time of reporting to exclude any area that does not have forest potential and its inclusion in the CEA will prevent the CEA from attaining forest cover. Under HIR compilation two, if it at the time of reporting it can no longer reasonably be expected that a CEA will become native forest through regeneration or attain forest cover, the area making up the CEA must be re-stratified. Land that can reasonably be expected to become native forest through regeneration and attain forest cover remains in the CEA and the remaining land is not part of the CEA. For NFMR projects any area greater than 0.2 hectares that has lost forest potential must be excluded from the CEA.

If you continue to apply the project activity on an area in an HIR or NFMR project that is not part of a CEA and at a later date trees regenerate on that area or it exhibits forest potential, it may be re-introduced as a CEA in the next offsets report.

Project participants should carefully assess each CEA for compliance with CEA stratification rules in the relevant method each time they report, and satisfy themselves that trees exist and growth can be detected in the intervening period. Where five years has elapsed since the CEA was first included in a report and no tree growth has been observed, the land must be excised.

To summarise, an area:

#### Has forest potential when, at the time of reporting:

* it is at least 0.2 hectares and includes trees or saplings with the potential to reach two metres or more in height and provide at least 20 per cent canopy cover over the area
* trees appear across the area
* the boundary of the area is no more than two metres from the nearest tree stem for HIR projects, or
* the minimum tree density is equal to or greater than the relevant number set out in Table 1 for NFMR projects.

#### Has no forest potential when, at the time of reporting:

* the area is less than 0.2 hectares
* the area is at least 0.2 hectares and does not include any tree stems, i.e. includes only shrubs, understory or grasses, or
* the trees that are present do not have the potential to attain two metres or more in height or crown cover that is at least 20 per cent of the area within the project crediting period.

#### Has lost forest potential when:

* it was previously included in an offsets report and showed forest potential but exhibits a similar or smaller crown cover at the time of reporting and five years has elapsed, or
* the number of tree stems in a 0.2 hectares lessens such that there are no longer sufficient trees across the CEA with the potential to attain two metres or more in height with crown cover that is at least 20 per cent of the area.

## Providing evidence

Project participants must satisfy themselves that their CEAs meet all the requirements of the method and that the data and information they submit supports their application for ACCUs.

As geospatial tools and imagery continue to advance throughout the 25-year crediting period for these projects, the Clean Energy Regulator will continue to review the types of evidence required. Rather than endorse any particular tool, data set or imagery for the life of a project, we will accept data and information supplied, and use a risk based approach to verify selected projects or CEAs using the imagery and tools available to us at that time.

Where higher resolution geospatial imagery or other information suggests that a crediting requirement has not been met, participants will be asked to justify the inclusion of that land within a CEA before a final decision is made to credit ACCUs.

1. CEAs must also meet other requirements specified in the relevant method. For example, under both the HIR and NFMR methods, the regeneration in a CEA must be even-aged. This guidance does not deal with those other requirements. [↑](#footnote-ref-1)
2. As these are modelled methods, forest potential must also be observed before commencing modelling of a regeneration event. [↑](#footnote-ref-2)
3. In an NFMR project, forest potential must be demonstrated by an area of land at the time the decision under section 2.3 of the NFMR method to implement the project mechanism is made. If an area did not have forest potential at that time, it cannot be stratified as a CEA under the NFMR method even if later it exhibits forest potential or regeneration. [↑](#footnote-ref-3)