

Protocol for re-evaluating rainforest on private property

Introduction

This document sets out the protocol for identifying and validating rainforest on private land. The protocol describes ways in which:

- rainforest is identified and mapped on private land
- issues relating to clearing applications and private native forestry property vegetation plans should be addressed in the assessment process.

The protocol is for use by Department of Environment and Climate Change (DECC) officers in determining rainforest when assessing private land for private native forestry property vegetation plans (PNF PVPs). Landowners and landholders will also find this protocol useful, especially the 'Landholder procedure' section which contains information on delineating and checking the boundary of rainforest on their properties when preparing their PNF PVPs.

The protocol uses as a basis the criteria and process which were used to create the rainforest map layer for north-eastern NSW, as part of the Comprehensive Regional Assessment (CRA) process.

Rainforest definition

The definition used in the Code of Practice for Private Native Forestry is:

'Rainforest is tree-dominated vegetation where the tree stratum (over 3 metres in height) which has the greatest crown cover has rainforest species making up 50% or more of the crown cover, except where non rainforest emergent species (including brushbox and turpentine) occur and exceed 30% or more of the upper stratum crown cover.

Rainforest includes all areas of rainforest mappable at a 1:25000 scale. Rainforest also includes areas exceeding 0.5 hectares occurring as isolated clumps or lineal strips of rainforest trees.'

The above definition means that areas with:

- a mainly closed understorey of rainforest plants greater than 3 metres tall (that is, areas with over 50% crown cover), and
- emergent non rainforest species including eucalypts, brushbox and turpentine, which have a combined crown cover of 30% or more

will be classified as moist eucalypt forest rather than rainforest.

Landholder procedure

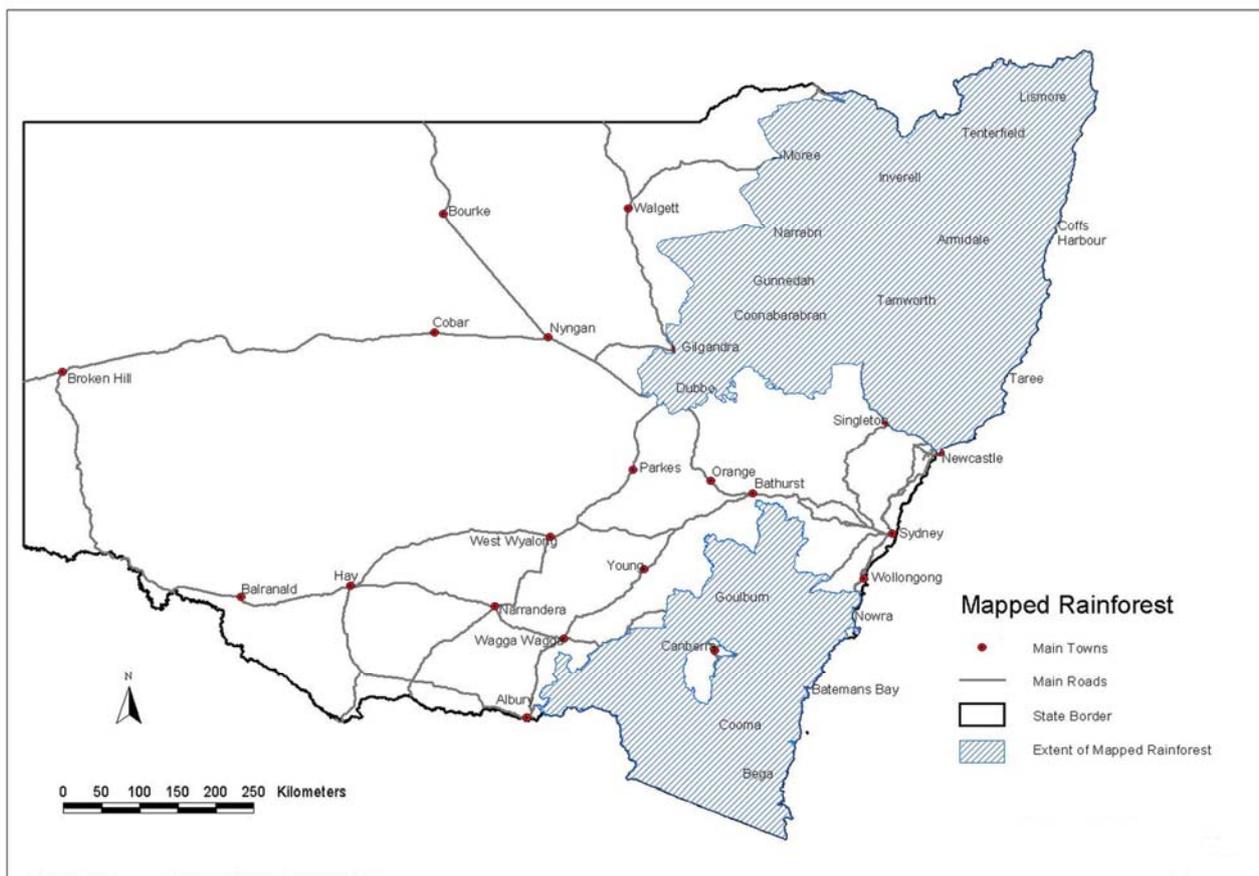
Under the Private Native Forestry Code of Practice, landholders must prepare PNF PVPs for areas of their properties where they wish to undertake private native forestry operations.

For NSW properties in areas in Figure 1, DECC will supply the best available map indicating any rainforest area occurring on the property at the time of the CRA mapping process.

The landholder should use this map to delineate and check the boundary of rainforest on their property. As a result of this assessment, the landholder can either:

- accept the rainforest map as being representative of the rainforest on their property and exclude the area from forest operations, or
- apply to DECC for an evaluation of the area proposed for private native forest for new rainforest mapping and determination of rainforest. The landholder will need to identify the area in dispute and provide evidence to DECC officers that the area is not rainforest. Evidence could include photographic and logging records, or other disturbance history.

Figure 1: Area of mapping for rainforest



DECC procedure

If the landholder chooses the second option listed above, a DECC aerial photographic interpretation (API) interpreter will assess the forest area using the latest available aerial photographs and the CRAFTI mapping rules (see following sections and Resource and Conservation Division 1997) to identify the presence and boundary of rainforest.

Field investigations will involve cruise sampling techniques to confirm the extent and boundary of rainforest. During field investigations, all rainforest areas will be assessed, whether previously mapped or not.

Aerial photographic interpretation

The mapping of rainforest on private lands through the CRAFTI process was derived primarily through API (Resource and Conservation Division 1997).

However, as API has been undertaken on a regional scale, rather than on an individual property scale, any re-evaluation of disputed areas will be undertaken by a DECC API specialist using the most recent aerial photography to map the actual extent of rainforest on the property. If field work is required for further validation, the steps in the next section will be followed. If field work is not required, the revised mapping will be taken as the new rainforest map.

Field assessment

Field assessment is a cruise sampling technique which uses a hierarchical system of assessing and confirming the area of rainforest consistent with the agreed standard definition (see 'Rainforest definition').

It should be noted that rainforest will generally be delineated and mapped down to a minimum area of 0.5 hectares.

Step 1

The API assessing officer will review recent aerial photography and reassess the presence and extent of rainforests on recent photos using the CRA criteria. Reassessment will not occur on non-logging areas, for example, slopes greater than 30 degrees, old-growth forests and non-commercial areas. New boundaries delineating rainforest areas will be produced based on the CRA criteria.

Step 2

Field transects will be designed and undertaken to verify the boundary of the rainforest. The field assessing officer will select a location for the transect based on areas from the most recent aerial photos to verify the presence and boundary of the rainforest areas.

The above steps are depicted below in Figure 2 on the next page.

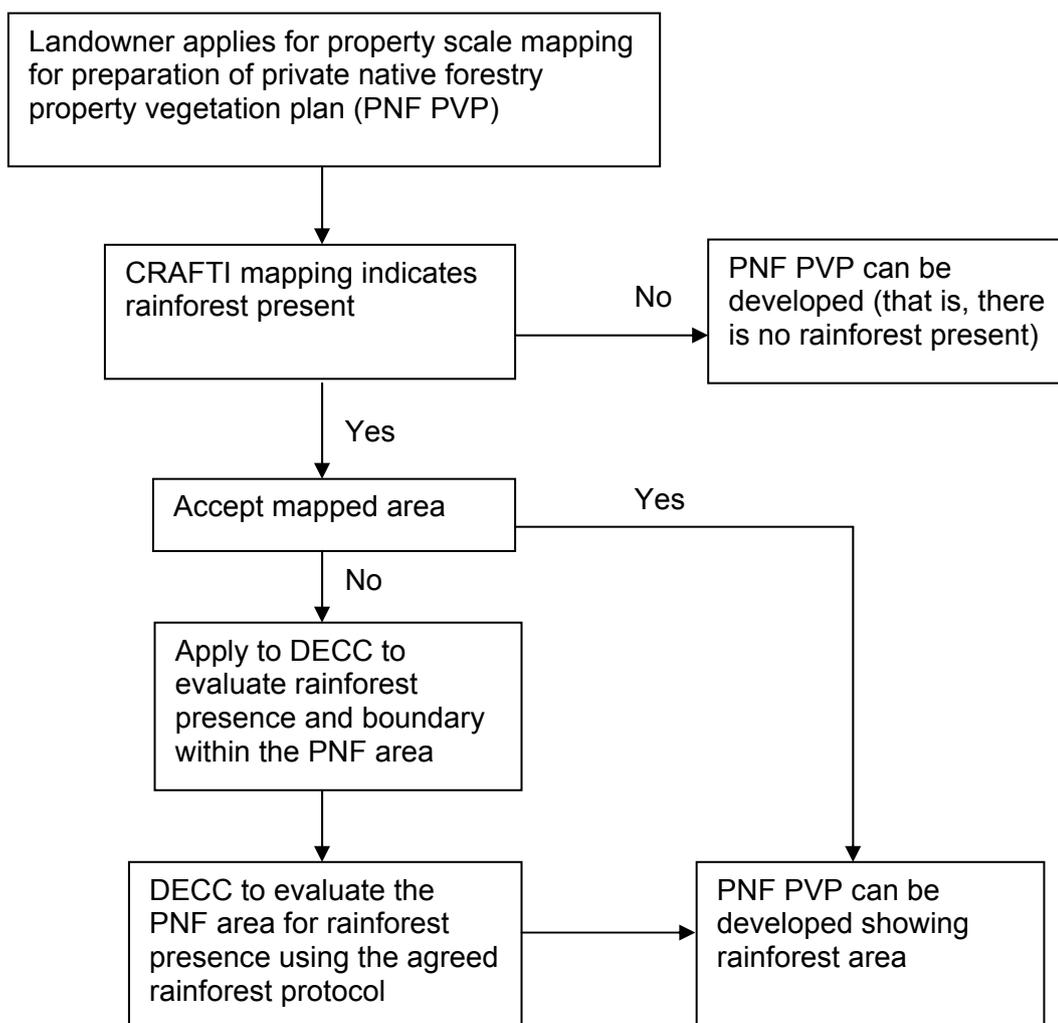
References

JANIS 1997, *Proposed nationally agreed criteria for the establishment of a comprehensive, adequate and representative reserve system for forests in Australia*, a report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Subcommittee.

Resource and Conservation Division 1997, 'CRAFTI aerial photographic interpretation manual', unpublished report, Department of Urban Affairs and Planning, now Department of Planning – phone their library on (02) 9228 6111 for a copy.

Resource and Conservation Division 1998, *UNE–LNE CRAFTI accuracy assessment report*, a report undertaken for the NSW CRA/RFA Steering Committee, Forests Taskforce, Department of the Prime Minister and Cabinet, Canberra.

Figure 2: Summary of the rainforest process



Glossary of terms and acronyms

| | |
|-------------------|--|
| API | Aerial photographic interpretation. |
| API pathway | Sequence of decisions and coding relating to API growth staging. |
| Bole | The main stem of a tree. |
| Crown | The leaf bearing branches of a tree. |
| Crown cover | The vertical projection of the periphery of tree crowns (crowns assumed to be opaque) within a designated area. Crown cover is estimated in terms of percentages of apical (pointed), regular (round) or irregular crowns as a proportion of total crown cover |
| CRA | Comprehensive Regional Assessment |
| CRAFTI | Comprehensive Regional Assessment Aerial Photographic Interpretation project undertaken for the Upper North-East, Lower North-East and Southern CRAs |
| Floristic | Pertaining to the plant species composition of an area. |
| Forest ecosystem | The unit of forest classification used for the CRA process and based on an analysis of all floristics, not just canopy species. |
| Forest operations | All clearing resulting from activities associated with forest management including harvesting operations, construction and maintenance of roads and tracks and prescribed burning for regeneration |
| GIS | Geographic Information System. Computer software allowing mapped and point locality information to be stored, retrieved and analysed. |
| JANIS criteria | See JANIS 1997 in 'References' section. |
| Opaque crowns | Tree crowns that cannot be seen through |
| Pyrophytic | Vegetation adapted to fire (including eucalypts, brush box and turpentine). |
| LNE | Lower North East regional forest agreement area. |
| Stable crown | Crowns having a stable width and height. |
| UNE | Upper North East regional forest agreement area. |

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