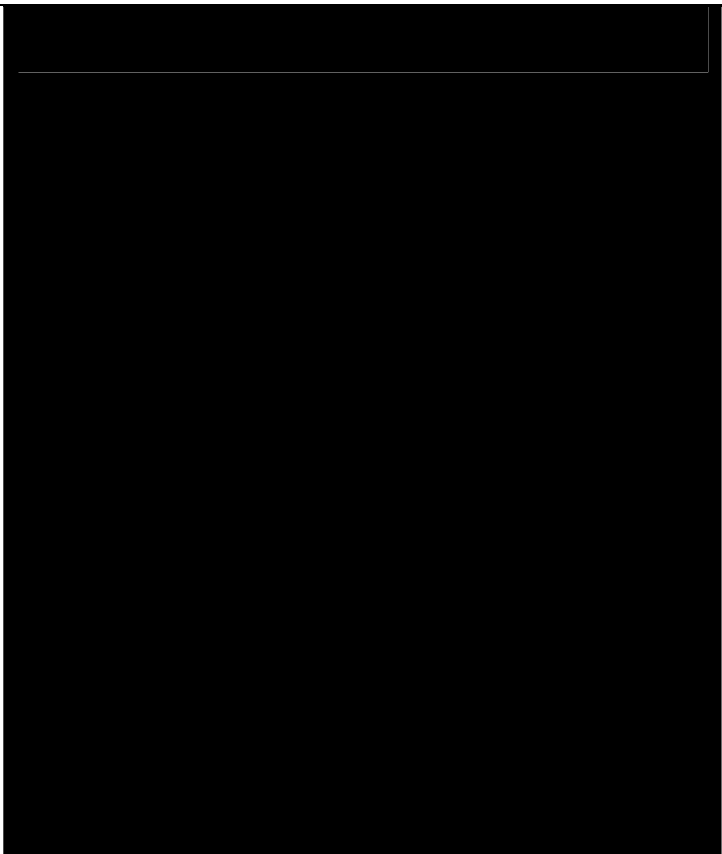


API (Aerial Photography
Interpretation) Mapping Report for
Eden Region



API (AERIAL PHOTOGRAPHY INTERPRETATION) MAPPING REPORT FOR EDEN REGION

**NEW SOUTH WALES NATIONAL PARKS
AND WILDLIFE SERVICE**

**A report undertaken for the NSW CRA/RFA Steering Committee
project number NE 21/MUL**

4 May 1998

Report Status

This report has been prepared as a working paper for the NSW CRA/RFA Steering Committee under the direction of the Environment and Heritage Technical Committee. It is recognised that it may contain errors that require correction but it is released to be consistent with the principle that information related to the comprehensive regional assessment process in New South Wales will be made publicly available.

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This project has been jointly funded by the New South Wales and Commonwealth Governments. The work undertaken within this project has been managed by the joint NSW / Commonwealth CRA/RFA Steering Committee which includes representatives from the NSW and Commonwealth Governments and stakeholder groups.

The project has been overseen and the methodology has been developed through the Environment and Heritage Technical Committee which includes representatives from the NSW and Commonwealth Governments and stakeholder groups.

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2. EXECUTIVE SUMMARY

This report has been prepared for the joint Commonwealth/State Steering Committee which oversees the comprehensive regional assessments of forests in New South Wales.

The comprehensive regional assessments (CRAs) provide the scientific basis on which the State and Commonwealth governments will sign regional forest agreements (RFAs) for the major forests of New South Wales. These agreements will determine the future of the State's forests, providing a balance between conservation and ecologically sustainable use of forest resources.

The aerial photography interpretation (API) mapping project was undertaken for the Eden CRA region, as required for the old growth and biodiversity assessments, to produce digital layers and associated maps of:

- special vegetation classes; mainly rainforests and non-eucalypt forests;
- broad and rare forest classes;
- validated and refined forest growth stages; and
- broad forest disturbance history.

Aerial photographic techniques were used to delineate forest canopy floristics, forest growth stage and broad historical forest disturbances. Each layer was transcribed onto clear acetate overlay and captured using either scanning or single photo digitising techniques. Final layers were merged to create polygon and grid files. Digital layers were used to assist in the derivation of forest ecosystem and old growth maps for the Eden CRA.

Broad forest classes were defined from 1990 and 1994 1:25,000 photography using field validations and known floristic data already captured. A minimum polygon size of 10 hectares for eucalypt forests and down to 2 hectares for rainforest and rare forest types was specified. Final layer was checked for accuracy to within 37 metres of 1:25,000 topographically mapped linear drainage features.

Forest growth stage classes used 1990 and 1994 1:25,000 photography to validate and refine the

Interim Forest Assessment Digital Growth Stage Map created in 1995. Additional field checking and code validation occurred. An independent validation of growth staging attributes was also undertaken. Principal differences between the Interim Forest Assessment (IFA) Broad Old Growth Mapping Project include:

- new rainforest definitions;
- increased field validation of growth stage classes;
- disturbance attributing recorded logging and fire disturbances only when obvious and visible from photography; and
- reduction in the minimum polygon size down to 10 hectares for eucalypt forests and down to 2 hectares for rainforest and rare forest types.

The application of changes resulted in an improved map of forest growth stages since the 1995 IFA maps. Final layer is considered accurate to within 37 metres of 1:25,000 topographically mapped linear drainage features.

Broad forest disturbance history was the last API assessment to be completed. Obvious and visible logging and wildfire disturbances were delineated from black and white 1:40,000 photography from 1962 (Eden) and 1967 (Bega/Goalan Point). Regrowth forests were not delineated. Delineation was rapid with no field checking. Transfer was by sketch mapping and digitised using AUTOCAD. No accuracy check has been completed for the layer and it is provided for contextual information only.

The expert API working group under the Environment & Heritage Technical Committee approved API pathways, field and desktop validation procedures and accuracy checking of digital layers.

