

Index to vegetation maps and related surveys of New South Wales and the Australian Capital Territory (1945–1986)

J. Thomas and H.H. Dlugaj

Abstract

Thomas,¹ J. & H. H. Dlugaj² (National Herbarium of New South Wales, Royal Botanic Gardens, Sydney, Australia 2000) 1990. *Index to vegetation maps and related surveys of New South Wales and the Australian Capital Territory (1945–1986)*. *Cunninghamia* 2(2): 183–196. An index to vegetation maps of New South Wales is outlined on four separate base maps. Related surveys and their maps are included where vegetation can be keyed to the map. The maps are described briefly in the list of references, indicating the botanical subdivisions of New South Wales to which they refer.

Introduction

Vegetation maps provide an inventory of plant communities and habitats. Changes in vegetation can be followed over periods of time from early explorers' notes to the present. Current vegetation maps are a basic tool for research workers and organisations involved in land-use management. A particular demand for vegetation maps is for environmental impact studies. For these, base-line vegetation data are vital for assessments of impact where various developments are proposed and for revegetation after environmental disturbance.

Until recently, there has been no overall review of vegetation mapping within New South Wales. In 1969 the National Herbarium of New South Wales began mapping in the North West and Central Coast of New South Wales. The long term aim is to prepare maps showing the distribution of vegetation communities throughout the state.

Other institutions have also embarked on state-wide surveys. The Soil Conservation Service of New South Wales is producing a series of district technical manuals encompassing vegetation, soils, geology and land use maps with notes, and a series of land systems maps at a scale of 1:250 000.

Previous vegetation map indexes for New South Wales are listed in Table 1. The most comprehensive of these is a Natural Vegetation map of Australia (Carnahan 1976). Carnahan's index was used as a basis for this index.

Table 1. Map indexes compiled previously

- a Carnahan, J.A. (1976). Natural vegetation. In *Atlas of Australian Resources*. Second series. Dept. of National Resources, Canberra.
An index to vegetation maps and related surveys appears on the back of this coloured vegetation map (1:6 000 000). Some of the maps listed here for

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N.S.W. have been omitted in this index because of the general unavailability of unpublished maps.

See also No. 10 in references.

- b Department of National Development (1961). *Index to Australian resources maps of 1940-1959*. Canberra, Australia.
Vegetation maps and species distribution maps published between 1940-1959. Soils, landforms, climate, forestry etc. maps are also listed.
- c Department of National Development (1966). *Index to Australian resources maps supplement for 1960-1964*. Canberra, Australia.
As above in (b). Also lists Forestry Commission forest type series maps published pre-1960. No supplements after 1964.
- d Department of National Development and Energy, Division of National Mapping (NATMAP) (1971-). *Thematic Mapping Bulletin*.
An annual publication listing all known thematic maps produced by government departments in the preceding year. Available from Bureau of Mineral Resources. (P.O. Box 378, Canberra City, A.C.T. 2601).
- e Hayden, E.J. (1971). *Natural vegetation of New South Wales*. Unpublished M.Sc. Australian National University, Canberra.
A compilation from previously published and unpublished vegetation maps. Reference maps with notes on the reliability of each are listed.

Types of maps included in this index

This index provides information on the availability of vegetation maps for particular areas of New South Wales. Other maps, such as Land Systems, Soils and Land Use maps frequently include vegetation data in their legends or accompanying texts. The close correlations between vegetation and both soils and land systems make these maps useful in areas lacking vegetation maps and hence some have been included. Generally, broad guidelines similar to those in the Thematic Mapping Bulletin (Division of National Mapping, Canberra) have been adopted:

- * The map is primarily concerned with vegetation or useful information about vegetation can be extracted from it.
- * The map covers part or all of New South Wales and the Australian Capital Territory. (A.C.T. lands occur within the South Coast and Southern Tablelands botanical subdivisions of N.S.W.).
- * The map scale is generally between 1:2 000 and 1:10 000 000.
- * The map size is at least B5 (176mm x 250mm).
- * Some base map detail is shown.
- * The map is generally available to the public.

Floristic lists sometimes include sketch maps of vegetation. These maps are often used in the compilation of larger maps but because the papers are primarily species lists they have not been included here. Pickard (1972), Bryant and Benson (1981) and Keith (1988) have prepared a bibliography of recent floristic lists. Maps in theses and environmental impact statements have not been included because these are either generally unavailable or are mostly based on pre-existing vegetation maps.

The map index (Figures 1-5) and reference list (Table 3)

The map reference list (Table 3) gives a brief description of each map stating type, scale and number of map units. Contents of any accompanying text are indicated. Reliability, and completeness vary considerable from map to map but no attempt has been made to show reliability of vegetation information.

Map coverage has been indicated on the map index of four base maps by noting the number of each map from the map index on the 1:100 000 map grid for New South Wales (Figure 1). The four base maps are for north-western (Figure 2), north-eastern (Figure 3), south-western (Figure 4) and south-eastern (Figure 5) New South Wales. A number in a grid cell indicates either whole or partial coverage of that cell.

The tables and map references

Table 2 summarises the maps relevant to each of the botanical subdivisions of the state as recognised by the National Herbarium of New South Wales (Jacobs and Pickard 1981). The references in Tables 1 & 3 are arranged alphabetically by authors and chronologically within authors. Entry into the bibliography can be done either by looking at the figures for any map available for an area or by botanical subdivisions.

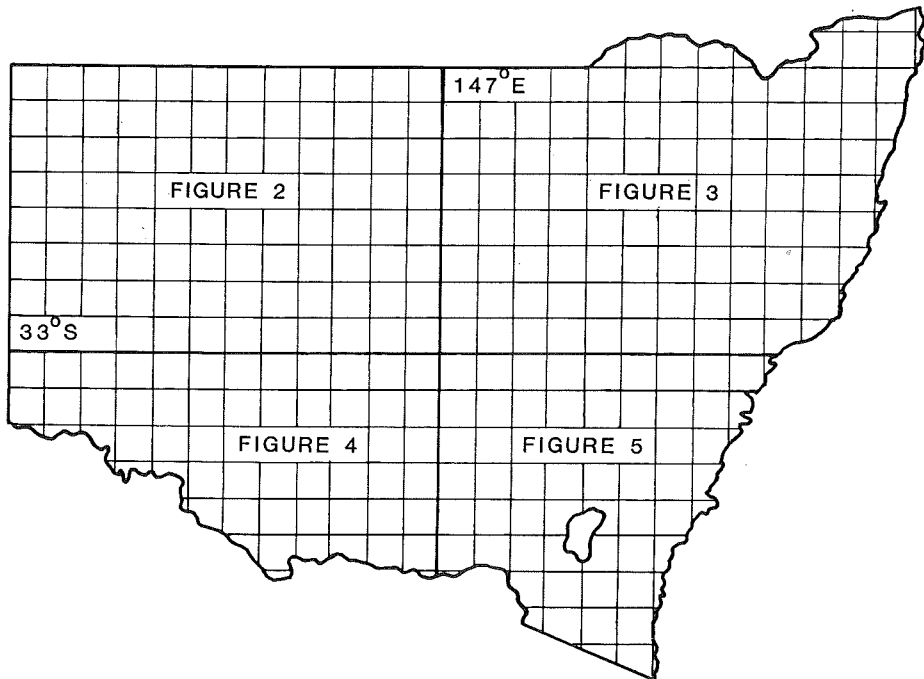


Figure 1. Key to the four index maps of New South Wales showing the 1:100 000 topographic map base grid.

Table 2. Maps relevant to New South Wales Botanical Subdivisions (abbreviations as on map of botanical divisions and subdivisions *Cunninghamia* 2 (1), 145).

Botanical Subdivision	Map number
NSW	1 10 20 24 36 88
NC	19 21 27 28 32 43 44 46 47 49 51 59 77 82 86 87
CC	3 4 6 7 9 12 15 16 21 30 33 48 53 58 75 82 84 85
SC	23 57 58 71 83
NT	27 32 43 45 46 47 49 51 59 77 78 82 86
CT	4 5 21 30 48 50 55 58 63 75
ST	11 13 17 23 26 37 38 39 48 54 55 57 58 63 71 72 73 83 89
NWS	1 27 45 46 47 51 52 53 60 62 70 77 78 82
CWS	2 35 48 50 55 56 63 73 74 75 76
SWS	35 37 38 39 54 55 56 73 74
NWP	2 8 11 27 29 42 45 46 51 53 60 64 65 80f 80g 80h 80j 80k 80m 80n 80o
SWP	1 2 11 35 42 54 64 65 76 80i 80l 81
NFWP	2 29 42 65 80a 80b 80c 80e 80g 80k 81
SFWP	2 22a 22b 22c 22d 22e 22f 22g 22h 22i 42 65 80d 80i 80p 81

Table 3. Map references

The following list of references is arranged alphabetically by author. The number appearing in the left hand column next to the reference is shown in relevant grid squares on Figures 2-5. Factors relating to the description and/or discussion of the following categories of information in the texts with maps are indicated as V-Vegetation, R-Rare plants, Sp-Species list, W-Weeds, Cs-Conservation status/significance, M-Management, F-Fire, S-Soils, Cl-Climatic, T-Topography/physiography/landforms, Ge-Geology, Gm-Geomorphology, H-Hydrology/water resources, Fa-Fauna, L-Land Use (past, present, future), Se-Socio-Economics.

1. NSW: Beadle, N.C.W. (1981). The Vegetation of Australia. Cambridge University Press, Cambridge. A black and white vegetation map shows 100 units for the Australian continent. Scale about 1:11 450 000. Text — V, CL, T, Ge, Gm, S.
2. CWS, NWP, SWP, NFWP, SFWP: Beadle, N.C.W. (1948). The vegetation and pastures of western New South Wales with special reference to soil erosion. Government Printer, Sydney. A coloured vegetation map shows 21 units. Scale 1:1 013 760 (1 inch = 16 miles). Text — V, Sp, S, Cl, T, Ge, H.
3. CC: Benson, D.H. (1986). The vegetation of the Gosford and Lake Macquarie 1:100 000 vegetation map sheet. *Cunninghamia* 1 (4): 467-489. A coloured vegetation map showing 12 units, and first published map of the Sydney 1:100 000 Vegetation series. Text — V, T, Ge, R, Cl, L, Gs.
4. CC: Benson, D.H. (1984). Vegetation of the Burragorang area. Unpublished. Royal Botanic Gardens, Sydney. Dyeline vegetation map covers the southern half of 1:100 000 Burragorang map sheet and shows 20 units. Prepared as part of the Sydney 1:100 000 Vegetation series. Text — V, R, Sp, T, Ge.
5. CC: Benson, D.H. (1984). Vegetation of the Wallerawang area. Unpublished. Royal Botanic Gardens, Sydney. Dyeline vegetation map showing 19 units. Prepared as part of the Sydney 1:100 000 Vegetation Series. Text — V, R, S, Cl, T, Ge, L.

6. CC: Benson, D.H. (1985). Vegetation of the Penrith area. Unpublished. Royal Botanic Gardens, Sydney. Dyeline vegetation map showing 20 units. Prepared as part of the Sydney 1:100 000 Vegetation Series. Text — V, Cl, T, Ge.
7. CC: Benson, J.S. & Fallding, H. (1981). Vegetation survey of Brisbane Water National Park and environs. *Cunninghamia* 1(1):79 – 113. A coloured vegetation map showing 12 units. Scale 1:50 000. Text — V, R, Sp, F, S, Cl, T, Ge.
8. NWS, CWS, NWP: Biddiscombe, E. F. (1963). A vegetation survey in the Macquarie Region, New South Wales. CSIRO Australia. Division of Plant Industry. Technical Paper 18. A coloured vegetation map shows 11 units. Scale about 1:300 000. Text — V, Sp, Cl, S, T, Ge.
9. CC: Burrows, F. J. (1983). Vegetation structural formations in the Elouera Bushland Natural Park. Elouera Bushland Natural Park Trust, Hornsby. An uncoloured vegetation map (p. 22) shows 5 units. Scale 1:25 000. Text — V, Sp, M, T, Ge, Fa, L.
10. NSW: Carnahan, J. A. (1976). Natural vegetation. In *Atlas of Australian resources*. Second series. Department of National Resources, Canberra. A coloured vegetation map of Australia shows 126 units. Scale 1:6 000 000. See (a) Table 1. Text — V.
11. NWS, CWS, SWP: Chinnick, L.J. & Key, K. H. (1971). Map of soils and of the locust *Chortiocetes terminifera*. CSIRO Australia Division Entomology Technical Paper 12. A three-sheet coloured soils map showing 33 soil units and 3 units of tree density. Scale 1:126 720. Dominants of associated natural

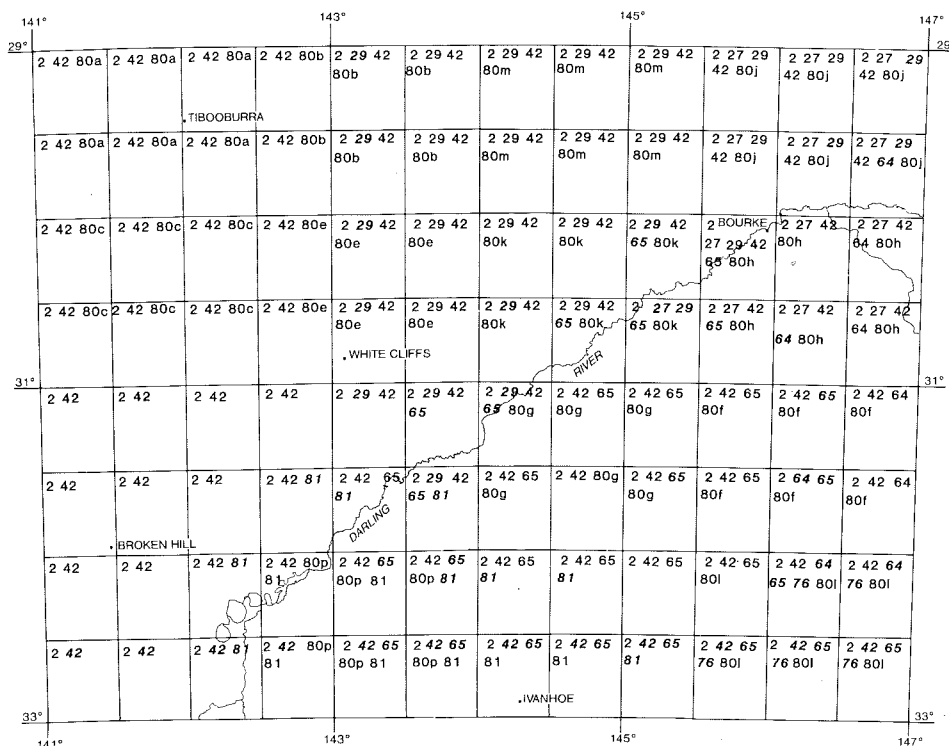


Figure 2. North-western New South Wales showing the 1:100 000 grid and the vegetation maps (Table 3) available for each grid cell.

vegetation keyed to soil units in Table 1 pp. 10–12. Text — S.

12. CC: Clarke, P. J. & Benson, D. H. (1986). Vegetation survey of Dharug National Park. Unpublished. Royal Botanic Gardens, Sydney. An uncoloured vegetation map shows 21 units. Scale 1:25 000. Text — V, Cs, R, Sp, Cl, Ge, Gm, S, L, W, F.

13. ST: Costin, A. B. (1954). A Study of the ecosystems of the Monaro Region of New South Wales with special reference to soil erosion. Government Printer Sydney. A coloured vegetation map shows 14 units. Scale about 1:400 000. Text — V, Sp, Cl, S, Ge, T, Fa, L.

14. CC: Department of Environment & Planning (formerly New South Wales Planning and Environment Commission) (1979). Illawarra Draft Regional Environmental Plan. Department of Environment Planning, Sydney. Coloured vegetation map shows 9 units. Scale 1:500 000. Text — V, H, T, Ge, Se.

15. CC: Department of Environment & Planning (1983). Brisbane Water estuarine wetlands study. Department of Environment and Planning, Sydney. Figures 4 to 13 show distribution of various wetland communities in the Brisbane Water area in 1954 and 1979. 3 communities are shown. Scale about 1:18 000. Figure 14 shows the distribution of seagrasses in Brisbane Water in 1981. Scale about 1:44 750. Text — V, Fa, Cs, M.

16. CC: Department of Environment & Planning (1984). Sydney Region North West sector. Regional Environmental Study Vol. 2. Map Atlas. Department of Environment and Planning, Sydney. Map 12 is a black and white vegetation map showing 18 floristic units. Map 13 shows vegetation structure with 7 units. Scale about 1:160 000. Vol. 1 describes in detail the north west sector in the Sydney Region context, a resource inventory and analysis and strategic development options.

17. ST: Department of Environment & Planning (1985). Kosciusko regional environmental study (Snowy River) Department of Environment and Planning, Sydney. Uncoloured vegetation map shows 7 units. Scale 1:500 000. Text — V, S, Cl, T, Ge, H, Fa, L, Se.

18. CC, CT: Fallding, H. & Benson, J. S. (1985). Natural vegetation and settlement at Macquarie Pass, Illawarra region, New South Wales. *Cunninghamia* 1(3):285 — 311. Black and white vegetation map shows 17 units. Scale 1:25 000. Text — V, Sp, Cl, S, Ge, T, L.

19. NC: Field, C. D. & Associates & Insearch Ltd. (1983). An investigation of natural areas Kooragang Island, Hunter River. ed. J. Moss. Department of Environment and Planning Sydney, 1983. Black and white vegetation map shows 11 units. Scale about 1:30 300. Text — V, Cs, M, H, Fa.

20. NSW: Forestry Commission of N.S.W. (various dates). Various forest and forest species type maps for N.S.W.

	Map name	Information on map	Scale
A.	Reserves	Designated forests & timber reserves	1:2 000 000
B.	Forests & forest types	Designated forests & timber reserves. On verso: NSW forest types.	1:4 000 000 coloured

	Map name	Information on map	Scale
C.	Forest species types from Forins	20 forest species units incl. plantations. From Forest Resource Inventory of the State 1971 — 72. Forestry Commission N.S.W. Tech. Paper 28 1976	1:1 000 000 Computer plotted 4 sheet dyeline
D.	Forest structure	Eleven forest structural units incl. plantations, dry lakes & sand ridges. See above for reference.	1:1 000 000 Computer plotted 4 sheet dyeline
E.	Forest species	The 20 units in C above are amalgamated into 11. From FORWOOD Resource panel. See C above for reference.	1:1 000 000 Computer plotted 4 sheet dyeline
#	State forests maps. (formerly project maps) (# = NC, CC, SC, NT, CT, ST, NSW, SWS, NWP, SWP, SFWP)	Designated forests, timber reserves & forestry plantations	1:125 000 coloured
#	Management maps 1:25 000 standard Topographic Map names. (# = NC, CC, SC, NT, CT, ST)	Forest species types including plantations.	1:25 000 dyeline

An up to date catalogue is available from the Forestry Commission of New South Wales.

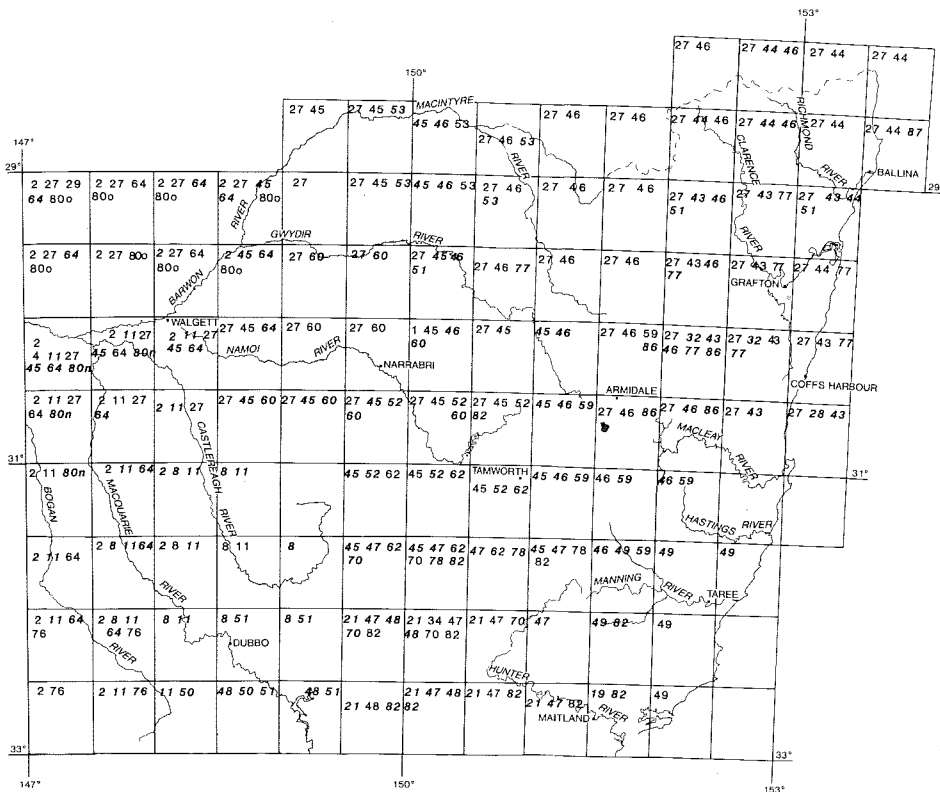


Figure 3. North-eastern New South Wales showing the 1:100 000 grid and the vegetation maps (Table 3) available for each grid cell.

21. NC, CC: Forster, G. R. (1981). Conservation values and vegetational changes Upper Hunter, Ulan and the western coalfields. Department of Environment and Planning. Uncoloured vegetation map shows 10 units. Scale 1:250 000. Text — V, Cs.
22. SFWP: Fox, M.D. (1983). Vegetation of South-Western New South Wales. Unpublished, Royal Botanic Gardens, Sydney. An ongoing project to map the vegetation of western New South Wales. Dyelines. 1:250 000 scale vegetation maps are compiled from 1:100 000 scale vegetation maps. Maps completed are 1:100 000 (a) Bunnerungee — 12 units, (b) Cuthero — 12 units, (c) Lake Victoria — 15 units, (d) Lindsay — 13 units, (e) Mildura — 9 units, (f) Para — 11 units, (g) Popiltah — 14 units, (h) Scotia — 10 units, (i) Wentworth — 12 units.
23. SC: Gunn, R. H., Austin, M.P., Galloway, R. W. & Richardson, D.P. (1978). Land systems of the South Coast study area, New South Wales. In *Land use on the South Coast of New South Wales. A study in methods of acquiring and using information to analyse regional land use options*. Eds Austin, M.P. and Cocks, K.D. Division of Land Use Research, CSIRO, Australia. Coloured land systems map shows 66 units which are keyed to geology, soils and vegetation. Scale 1:150 000. Text is 4 volumes Vol. 1 — General report, Vol. 2 — Biophysical background studies (V + 8 sketch maps of vegetation type distribution, C, Ge, T, S, Fa, H), Vol. 3 — Se, Vol. 4 — L.
24. NSW: Hayden, E. J. (1971). Natural vegetation of New South Wales. In *Atlas of resources of New South Wales*. Department of Industrial Development and Decentralisation of N.S.W. (formerly Department of Decentralisation and Development of N.S.W.) Coloured vegetation map shows 51 units. Scale 1:1 500 000. This is a vegetation compilation from previously published and unpublished maps.
25. SC: Ingwersen, F. (1976). Vegetation of the Jervis Bay Territory. Department of the Capital Territory Conservation Series 3. Australian Government Publishing Service, Canberra. Two vegetation maps: A coloured vegetation map with inset shows 19 units. Scale 1:25 000 with scale of inset map about 1:7 600. An uncoloured vegetation and land use map on pp. 14–15 shows 11 units. Scale 1:100 000. Text — V, Sp, Cl, T, Ge, F, M, L, W, E. See also *Operculum* 3 (1,2) Vegetation of the Jervis Bay District with special reference to land use and conservation. Map here is a simplified version of the above.
26. ST: Ingwersen, F., Evans, O. & Griffiths, B. (1974). Vegetation of the Ainslie-Majura Reserve. Department of Capital Territory Conservation Series 2. Australian Government Publishing Service, Canberra. An uncoloured vegetation map shows 9 units. Scale about 1:21 170. Text — V, Sp, Cl, S, Se, W, F, L, M.
27. NC, NT, NWS, NWP: Isbell, R. F. (1962). Soils and vegetation of the brigalow lands, Eastern Australia. CSIRO Soils and Land Use Series 43. The distribution of brigalow vegetation is shown by a coloured soils map showing 5 units. Scale about 1:1 500 000. Text — Cl, Ge, L.
28. NC: Jackson, Teece, Chesterman, Willis & Partners. (1983). Arakoon State Recreation Area draft plan of management. Volume 1 scheme of operations. Prepared for National Parks & Wildlife Service. An uncoloured vegetation map opp. p. 12 shows 9 units. Scale about 1:15 000. Text — V, Cl, T, Ge, S, L, M.
29. NFWP, NWP: James, J. W. (1960). Erosion survey of the Paroo-Upper Darling Region. Pt. III. Vegetation and pastures. *Journal of the Soil Conservation Service New South Wales* 10 (3): 185–206. An uncoloured vegetation

map (pp. 190–191) shows 10 units. Scale about 1:1 622 000. Text — V.

30. CC: Keith, D. A. & Benson, D. H. (1988). The natural vegetation of the Katoomba 1:100 000 map sheet. *Cunninghamia* 2, 107–143. Vegetation map shows 32 units. Scale 1:100 000. Prepared as part of the Sydney 1:100 000 Vegetation Series. Text — V, R, Sp, Cl, T, Ge.

31. NFWP: Mabutt, J. A., Corbett, J. R., Milthorpe, P. L., Ngethe, J. C., Sullivan, M., Bailey, P. F., Bell, F. C., Hall, L. S., Myers, K. & Parker, B. S. (1974). Lands of the Fowlers Gap-Calindary area New South Wales. Fowlers Gap Arid Zone Research Station, Research Series 4. The University of New South Wales. A coloured land systems map shows 31 units. Scale 1:350 000. Also an uncoloured pasture lands map showing 12 units. Scale about 1:500 000. Text — V, T, S, Ge, Gm, Cl, L, Fa.

32. NC, NT: McArthur, W. M. (1964). Soils and land use in the Dorrigo–Ebor–Tyringham area, New South Wales. CSIRO Soils and land Use Series 6. Vegetation is discussed and related in text to a coloured soils map showing 7 units. Scale is about 1:253 440. Text — Cl, S, V, L.

33. CC: McRae, R. H. D. (1983). Vegetation of Bouddi National Park. Unpublished. Royal Botanic Gardens, Sydney. Dyeline vegetation map shows 20 units. Scale 1:12 500. Text — V, Sp, R, Cs, M, W, F, Cl, S, Ge, Gm.

34. CWS: McRae, R. H. D. & Cooper, M. G. (1985). Vegetation of the Merriwa area, New South Wales. *Cunninghamia* 1 (3): 351–269. A coloured vegetation map shows 17 units. Scale 1:100 000. Text — V, Sp, R, Cs, Cl, Ge, Gm, S, L.

35. CWS, SWS, SWP: Moore, C.W.E. (1953). The vegetation of the south-eastern Riverina, New South Wales. 1. The climax communities, and 2. The disclimax communities. *Australian Journal of Botany* 1 (3): 485–547, 548–567. A coloured vegetation map shows 8 units. Scale about 1:506 880. Text — V, Sp, R, Cl, S, Ge, H.

36. NSW: Moore, R.M. ed. (1970). *Australian Grasslands*. Australian National University Press, Canberra. Three coloured vegetation maps of Australia. Scale 1:12 000 (i) Vegetation of Australia – 24 units, (ii) Grazing Lands of Australia – 13 units, (iii) Pastures of Australia – 6 units. Text — S, V, Fa, M, L, W.

37. ST, SWS: Morland, R. T. (1958–1959). Erosion survey of the Hume catchment area. Parts 2, 3 & 4 vegetation. *Journal of the Soil Conservation Service New South Wales* 14 (4): 293–326, 15 (1): 66–99 and 15 (2): 72–186. Two coloured vegetation maps. Scale 1:253 440 (i) Climax ecology – 22 units. (ii) Grassland types – 8 units. See also Parts 1 14 (3) 191–255. Text — Cl, S, Ge., Part 4 15 (3) 208–226. Text — L, F., Part 6 16 (1): 5–30. Text — E, M.

38. ST: National Capital Development Corporation (1981). Murrumbidgee River ecological study. Technical Paper 33. Canberra. An uncoloured vegetation map shows 10 units. Scale about 1:25 000. Text — V, R, Fa, S, L, Cs, M.

39. ST: National Capital Development Corporation (1984). The ecological resources of the A.C.T. Technical Paper 42. Canberra. Coloured vegetation map shows 29 units. Scale 1:100 000. Text — V, R, Cs, Fa. Also another map showing sites of ecological interest. Scale about 1:250 000.

40. SFWP: Northcote, K. H. (1951). A pedological survey of the soils occurring at Coomealla, New South Wales. CSIRO Bulletin 264. An uncoloured vegetation map shows 19 units. Scale 1:15 840. Text — Cl, Ge, T, S, V.

- 41. **LHI:** Pickard, J. (1985). Vegetation of Lord Howe Island. *Cunninghamia* 1 (2): 133 — 265. A coloured vegetation map shows 25 units. Scale 1:15 840. Text — V, S, Cl, Ge, T, Fa, L.
- 42. **NWP, SWP, NFWP, SFWP** Pickard, J. (ms). Vegetation map of North-Western New South Wales. Unpublished. Royal Botanic Gardens, Sydney. Dyeline vegetation map covers the area 27–33° S and 141–147° E and shows 44 units. Scale 1:1 000 000.
- 43. **NC, NT:** Premier's Department, Division of Reconstruction and Development, Sydney. (1945). The Clarence Region. A preliminary survey of resources. A broad discussion on forest species is related to a climatic zones map. Also some floristic breakdown in relation to soils. Scale 1:253 440. Text — T, Ge, Cl, S, V, L, Se.
- 44. **NC:** ——— (1945). The Richmond–Tweed Region. A preliminary survey of resources. A broad discussion on forest species is related to a climatic zones map. Also some floristic breakdown in relation to soils and geology. Scale 1:253 440. Text — T, Ge, Cl, S, V, L, Se.
- 45. **NT, NWS, NWP:** ——— (1950). The Namoi Region. A preliminary survey of resources. Vegetation notes describe 8 main units that are keyable to soils map. Scale 1:633 600. Text — T, Ge, Cl, V, S, E, H, L, Se.
- 46. **NC, NT, NWS:** ——— (1951). The New England Region. A preliminary survey of resources. Vegetation notes describe 8 main units with components keyable to a soils map. Scale 1:633 600. Text — T, Ge, Cl, E, H, L, Se.
- 47. **NC, NT, CC, CT, NWS, CWS:** ——— (1952). The Upper Hunter Region. A preliminary survey of resources. Vegetation is described in relation to soil

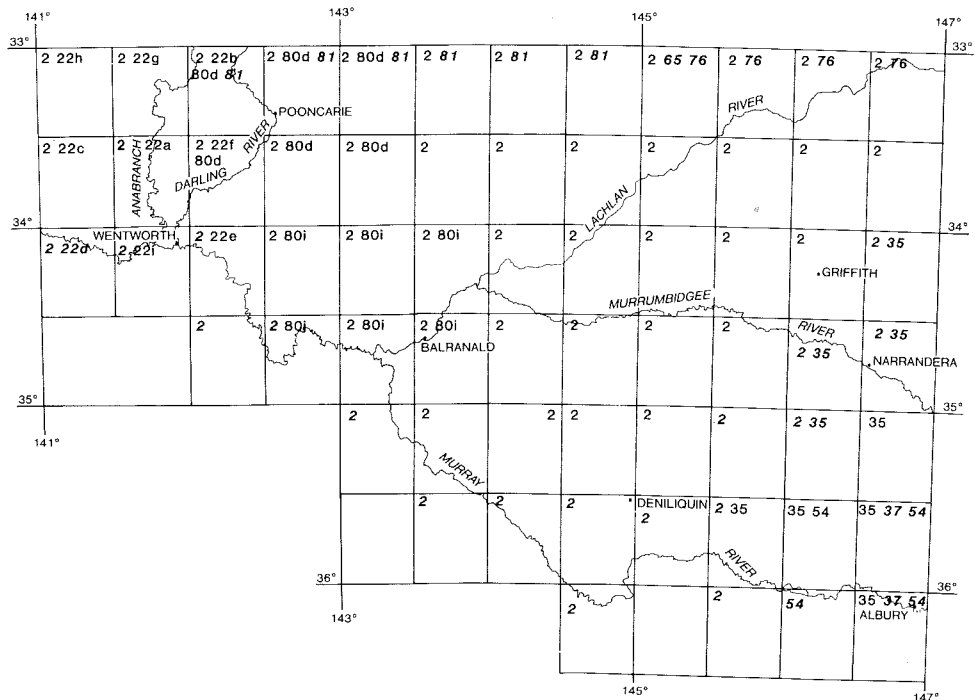


Figure 4. South-western New South Wales showing the 1:100 000 grid and the vegetation maps (Table 3) available for each grid cell.

erosion and proclaimed catchment area maps. Scale 1:1 013 760. Text — T, Ge, Cl, V, S, E, H, L, Se.

48. CC, CT, CWS: ——— (1953). The Mitchell Region. A preliminary survey of resources. Vegetation map shows 22 units. Scale 1:1 013 760. Text T, Ge, Cl, S, E, H, L, Se. Soil Conservation Service of New South Wales District Technical Manuals. (Various authors and dates). Soil Conservation Service of New South Wales. Text of the District Technical Manuals (D.T.M.) includes S, Ge, L, E, V, Cl and maps relating to the above subjects.

49. NC: Cornally, M. J. (1985). Vegetation. In Taree D.T.M. Vegetation map shows 12 units. Scale about 1:625 000.

50. CT, CWS: Dwyer, P.J. (1978). Vegetation. In Orange D.T.M. (D.T.M.). Vegetation map shows 8 units. Scale approximately 1:312 500.

51. CWS: Dwyer, P. J. (1982). Vegetation. In Wellington D.T.M. Vegetation map shows 11 units. Scale about 1:500 000.

52. NWS: Dyson, J. & Marston, D. (1976). Vegetation. In Gunnedah D.T.M. Vegetation map shows 4 units. Scale about 1:417 000.

53. CWS: Johnston, W. H. (1975). Vegetation. In Temora D.T.M. Vegetation map shows 5 units. Scale about 1:330 000.

54. ST, SWS: Johnston, W. H. (1978). Vegetation. In Albury D.T.M. Vegetation map shows 9 units. Scale about 1:500 000.

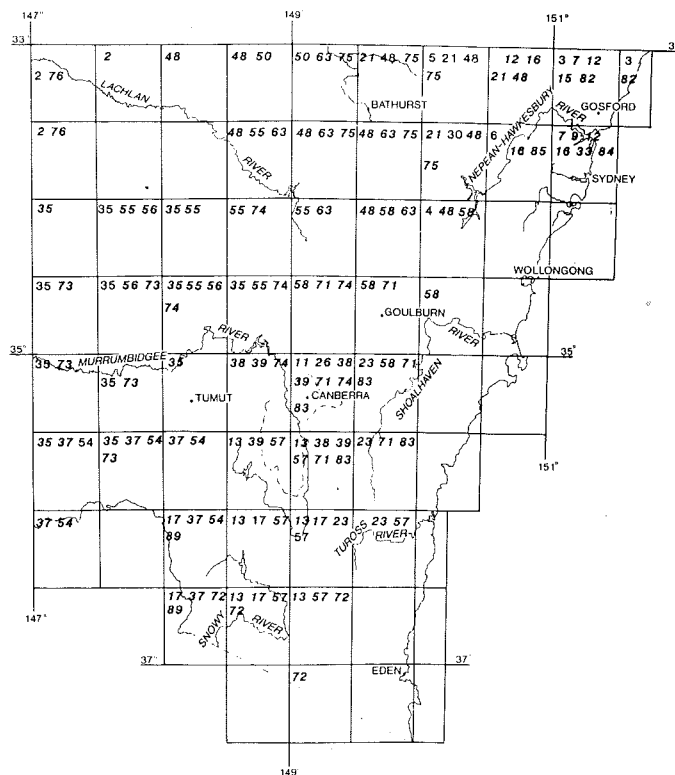


Figure 5. South-eastern New South Wales showing the 1:100 000 grid and the vegetation maps (Table 3) available for each grid cell.

55. **CWS:** Johnston, W. H. (1982). Vegetation. In Young D.T.M. Vegetation map shows 6 units. Scale about 1:400 000. Map is adopted from Costin (1954).
56. **CWS, SWS:** Johnston, W.H. (1986). Vegetation. In Cootamundra D.T.M. Vegetation map shows 7 units. Scale about 1:500 000.
57. **ST:** Keane, P. A. (1977). Vegetation. In Cooma D.T.M. Vegetation map shows 8 units. Scale about 1:400 000. Map is adopted from Costin (1954).
58. **ST:** Lang, R. D. (1981). Vegetation. In Goulburn D.T.M. Vegetation maps shows 8 units. Scale about 1:470 600.
59. **NC, NT:** Marston, D. (1976). Vegetation. In Walcha D.T.M. Vegetation map shows 8 units. Scale about 1:500 000.
60. **NWS, NWP:** Marston, D. (1978). Vegetation. In Narrabri D.T.M. Two vegetation maps: Tree communities map shows 16 units, Grass communities map shows 6 units. Both scales 1:500 000.
61. **NWS:** Marston, D. (1979). Vegetation. In Tamworth D.T.M. Two vegetation maps: Tree Communities map shows 18 units, Grass communities map shows 4 units. Both scales 1:500 000.
62. **NWS:** Marston, D. (1980). Vegetation. In Quirindi D.T.M. Two vegetation maps: Tree communities map shows 10 units, grass communities map shows 4 units.
63. **CT:** More, R. (1976). Vegetation. In Blayney D.T.M. Vegetation map shows 7 units. Scale about 1:312 500.
64. **NWP, SWP:** Thompson, D. F. (1982). Vegetation. In Nyngan D.T.M. Vegetation map shows 15 units. Scale about 1:500 000.
65. **NWP, SWP, NFWP, SFWP:** Walker, P.J. & Green, D. R. (1978). Vegetation. In Cobar D.T.M. Vegetation map shows 12 units. Scale about 1:1 333 333.

The following District Technical Manuals give no individual section authors.

66. **ST:** Braidwood D.T.M. (no date). Vegetation map shows 7 units. Scale about 1:253 440.
67. **CWS:** Scone D.T.M. (1971). Vegetation map shows 7 units. Scale about 1:253 440.
68. **NWS:** Inverell D.T.M. (1972). Vegetation map shows 9 units. Scale about 1:443 520.
69. **NT, NWS:** Barraba D.T.M. (1973). Two vegetation maps: A tree map shows 2 units and a grassland map shows 7 units. Both scales about 1:253 440.
70. **CWS:** Merriwa D.T.M. (1973). Vegetation map shows 5 units. Scale about 1:294 000.
71. **ST:** Queanbeyan D.T.M. (1973). Vegetation map shows 10 units. Scale about 1:312 000.
72. **ST:** South-East District Bombala T.M. (1973). Vegetation map shows 6 units (after Costin, 1954). Scale about 1:253 440.
73. **CWS, SWS:** Wagga Wagga D.T.M. (1973). Vegetation map shows 6 units (after Moore, 1953). Scale about 1:330 000.

- 74. ST, CWS, SWS:** Yass D.T.M. (1974). Vegetation map shows 6 units. Scale about 1:312 500.
- 75. CT:** Bathurst D.T.M. (1974). Vegetation map shows 8 units. Scale about 1:285 000.
- 76. CWS:** Condobolin D.T.M. (1974). Vegetation map shows 9 units. Scale about 1:770 000.
- 77. NC:** Grafton D.T.M. (1975). Vegetation map shows 8 units. Scale about 1:400 000.
- 78. NT, CWS:** Murrurundi D.T.M. (1975). Vegetation map shows 7 units. Scale about 1:350 000.
- 79. NWS, NWP:** Warialda D.T.M. (1975). Vegetation map shows 7 units. Scale about 1:660 000.
- 80. NWP, SWP, NFWP, SFWP:** Soil Conservation Service of New South Wales (various dates). Land Systems Map Series. All maps are coloured & 1:250 000 scale. Map legends—Ge, T, S, V. Milparinka (1979) 31 units, Urisino (1979) 21 units, Cobham Lake (1980) 38 units, Pooncarie (1980) 21 units, White Cliffs (1980) 42 units, Cobar (1983) 25 units, Barnato (1983) 46 units, Bourke (1983) 30 units, Balranald (1984) 22 units, Enngonia (1984) 30 units, Louth (1984) 47 units, Nymagee (1984) 32 units, Yantabulla (1984) 17 units, Walgett-Nyngan (1985) 12 units, Angledool-Moree (no date) 22 units, Manara (1985) 33 units.
- 81. SWP:** Stannard, M. E. (1963). Erosion survey of the Central East-Darling Region. Part III Vegetation. *Journal of the Soil Conservation Service of New South Wales* 19 (1): 17–28. Vegetation map pp. 22–23 shows 8 units. Scale about 1:1 013 760. Text — V, T in Part I 18 (3) 143–153, S in Part II 18 (4) 173–182 and E in Part IV 19 (2) 69–80.
- 82. NC, CC, NT, CWS:** Story, R. (1963). Part VII. In general report on the lands of the Hunter Valley. CSIRO Land Research Series 8. A coloured vegetation map shows 13 vegetation units and 6 units of grass vegetation. Scale about 1:750 000. Text — V, Sp, Cl, T, S, Ge, Gm.
- 83. SC, ST** Story, R. (1969). Part VII. In lands of the Queanbeyan–Shoalhaven area A.C.T. and N.S.W. CSIRO Land Research Series 24. A coloured vegetation map shows 5 units with further separation of some areas. Scale 1:350 000. Text — V, Sp.
- 84. CC, CT:** Sydney Series 1:25 000 Vegetation Maps. (Various dates and authors). Unpublished. Royal Botanic Gardens, Sydney. Maps are used in compiling the 1:100 000 Vegetation Series maps. Scale 1:25 000. Dyeline. Barallier (Cooper 1983) – 8 units, Ben Bullen (Benson 1983) – 8 units, Bimlow (Keith 1984) – 9 units, Cullen Bullen (Benson 1983) – 12 units, Glen Alice (Benson, 1983) – 5 units, Gospers Mountain (Benson, 1983) – 5 units, Hampton (Keith 1984) – 9 units, Hartley (Keith 1984) – 15 units, Hilltop (Cooper 1983) – 12 units, Jenolan (Keith 1984) – 12 units, Kanangra (Keith 1984) – 10 units, Katoomba (Keith 1984) – 10 units, Kurragong (Benson 1984) – 9 units, Lithgow (Benson 1983) – 11 units, Liverpool (Benson 1984) – 8 units, Mittagong (Cooper & Powrie 1983) – 12 units, Mt Morgan (Benson 1983) – 6 units, Mt Wilson (Keith 1984) – 13 units, Penrith (Benson 1984) – 8 units, Prospect (Benson 1984) – 5 units, Riverstone (Benson 1984) – 9 units, Rock Hill (Benson 1983) – 9 units, Springwood (Benson 1983) – 11 units,

Warragamba (Benson 1984) – 7 units, Wilberforce (Benson 1984), – 7 units, Wollangambe (Benson 1983) – 10 units.

Thomas, J. & Benson, D. H. (1985). Vegetation survey of Ku-ring-gai Chase National Park and Muogamarra Nature Reserve. Unpublished. Royal Botanic Gardens, Sydney. Uncoloured dyeline vegetation map shows 22 units. Scale 1:25 000. Text is two reports. 1. Ku-ring-gai Chase National Park — V, Cs, R, Sp, Cl, Ge, Gm, S, L, W, F. 2. Muogamarra Nature Reserve — V, Cs, R, Sp, Cl, Ge, Gm, S, L, W, F.

85. CC: Thomas, J. & Burkett, J. (1984). Vegetation survey of Bents Basin State Recreation Area. Unpublished. Royal Botanic Gardens, Sydney. Uncoloured vegetation map shows 25 units. Scale 1:10 000. Text — V, Cs, R, Sp, Cl, S, Ge, T, W, F.

86. NC, NT: University of New England, Department of Geography (1965). Preliminary report of geography of Dumaresq Shire for the Council of Dumaresq Shire, Armidale N.S.W. (ed. R. F. Warner). An uncoloured land cover map shows 9 units incl. crops and introduced pastures for 1964. Scale 1:63 360. Text — V, T, Ge, Cl, S, E, L, Se.

87. NC: Williams, J. B. & Harden, G. J. (1979). The vegetation and flora of Brunswick Heads, N.S.W. University of New England, Armidale. N.S.W. Uncoloured vegetation map shows 5 units. Scale 1:25 000. Text — V, R, Sp.

88. NSW: Williams, R. J. (1955). Vegetation regions. In Atlas of Australian Resources. 1st ed. Department of National Development, Canberra. Coloured, pre-settlement vegetation map of Australia shows 35 units. Scale 1:6 000 000. Text — V.

89. ST: Wimbush, D. J. & Costin, A. B. (1973). Vegetation mapping in relation to ecological interpretation and management in the Kosciusko Alpine Area. CSIRO Australia Division of Plant Industry Technical Paper 32. Two coloured vegetation maps. One map of alpine/subalpine area shows 9 vegetation units. Scale 1:31 680. Inset map of general area is after Morland (1952) and shows 12 units. Scale about 1:90 000. Text — V, Cs, L.

Acknowledgments

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