



New South Wales

Threatened Species Conservation Act 1995 No 101

Notice of Final Determination and Amendment of Schedule 1 to Act

The Scientific Committee established under the *Threatened Species Conservation Act 1995* has, in pursuance of Division 3 of Part 2 of that Act, made a final determination to insert the following ecological community in Part 3 of Schedule 1 to that Act (Endangered ecological communities) and, accordingly, that Schedule is amended as set out in Annexure "A" to this Notice:

Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion
(as described in the final determination of the Scientific Committee to list the ecological community)

The final determination, set out in Annexure "B" to this Notice, to insert this ecological community in Part 3 of Schedule 1 has been made because the Scientific Committee is of the opinion that the community is likely to become extinct in nature in New South Wales unless circumstances and factors threatening its survival cease to operate.

Copies of the final determination may be inspected at:

The Information Centre (Level 1)
National Parks & Wildlife Service
43 Bridge Street
Hurstville NSW 2220

and at all District Offices of the National Parks and Wildlife Service during business hours.

Signed at Sydney, this 9th day of July 1999.

Dr Chris Dickman

Chairperson
Scientific Committee

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Annexure “A”

Schedule 1 to the *Threatened Species Conservation Act 1995* is amended by inserting in Part 3 in alphabetical order the matter:

Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion
(as described in the final determination of the Scientific Committee to list the ecological community)

Annexure “B”

Final Determination of the Scientific Committee to list the Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion as an endangered ecological community.

ANNEXURE "B"

NSW SCIENTIFIC COMMITTEE
Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list the Lowland Rainforest on Floodplain in the New South Wales North Coast bioregion as an Endangered Ecological Community on Part 3 of Schedule 1 of the Act. Listing of ecological communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

1. Lowland Rainforest in an undisturbed state, is a closed canopy forest characterised by its high species richness and structural complexity. In disturbed stands the canopy continuity may be broken, or the canopy may be smothered by exotic vines.
2. Lowland Rainforest on floodplains covers less than 1000 hectares in NSW and remaining stands are small and isolated. Stands occur in the New South Wales North Coast bioregion.
3. Historically, the major cause of loss of rainforest on floodplains was clearing for agriculture.
4. Subsequent to clearing the disturbed and exposed edges of remnant stands were vulnerable to invasion by exotic plant species; nearly all surviving remnants are subject to this threat.
5. The effects of clearing, fragmentation and isolation on the functional ecology of the remnant stands has been little studied, but impacts on plant regeneration (including pollination and seed dispersal) are likely. Many of the tree and shrub species are obligate outbreeders so that disruption to pollinator systems could have long term, deleterious consequences.
6. Other threats, although not all are experienced at all sites, include fire, grazing, rubbish dumping, clearing for competing land uses (including clearing of understorey for recreational facilities) and dissection by vehicular and foot tracks.
7. Although very few sites have been subject to detailed fauna survey, it is known that some sites possess an extremely rich insect fauna (documented in the case of Lansdowne Reserve by Williams GA (1993) Hidden Rainforests: subtropical rainforests and their invertebrate biodiversity. UNSW Press/Australian

Museum, Sydney.) It is probable that other sites have comparable invertebrate diversity.

8. Although every stand of rainforest is unique in terms of biota, the similarity in structure and the presence of a core assemblage of species permit the definition of lowland floodplain rainforest as a distinct ecological community. This list of plants has been compiled to include species which are characteristic of NSW rainforest communities which occur on floodplains, although not all species occur in every stand, and individual species may be found in other communities. These include all or part of ten of Floyd's Suballiances shown in Point 10.

<i>Aphananthe philippinenses</i>	<i>Araucaria cunninghamii</i>
<i>Archontophoenix cunninghamiana</i>	<i>Arthropteris</i> spp.
<i>Austromyrtus bidwillii</i>	<i>Castanospermum australe</i>
<i>Ceratopetalum apetalum</i>	<i>Cryptocarya obovata</i>
<i>Cyathra cooperi</i>	<i>Dendrocnide excelsa</i>
<i>Dysoxylum molissimum</i>	<i>Elaeocarpus grandis</i>
<i>Elaeocarpus obovatus</i>	<i>Elatostemna reticulatum</i>
<i>Ficus coronata</i>	<i>Ficus macrophylla</i>
<i>Ficus Obliqua</i>	<i>Ficus superba</i> var. <i>henneana</i>
<i>Ficus watkinsiana</i>	<i>Flindersia schottiana</i>
<i>Flindersia xanthoxyla</i>	<i>Grevillea robusta</i>
<i>Heritiera trifoliata</i>	<i>Linospadix monostachyus</i>
<i>Livistona australis</i>	<i>Microsorium scandens</i>
<i>Piper novae-hollandiae</i>	<i>Pollia crispata</i>
<i>Pothos longipes</i>	<i>Randia chartacea</i>
<i>Sloanea australis</i>	<i>Sloanea woollsii</i>
<i>Streblus brunonianus</i>	<i>Syzygium australe</i>
<i>Syzygium francisii</i>	<i>Toona ciliata</i>
<i>Tristaniopsis laurina</i>	<i>Waterhousea floribunda</i>

9. The total species assemblage is much larger with many species restricted to one or a few sites, or present only in very low abundance. Not all the characteristic species are present at every site.
10. For particular purposes it may be appropriate to reorganise categories within the lowland floodplain rainforest. The most widely used classification of rainforest types in NSW is that of Floyd, A.G. (1990) Australian Rainforests in New South Wales. Surrey Beatty and Sons, Chipping Norton. In this classification the major rainforest Suballiance within the nominated community is Suballiance 3: *Cryptocarya obovata*–*Dendrocnide excelsa*–*Ficus* spp–*Araucaria*. Elements of Suballiance 1: *Heritiera trifoliata*, Suballiance 2: *Toona*–*Flindersia*, Suballiance 4: *Elaeocarpus grandis*, Suballiance 5: *Castanospermum*–*Dysoxylum molissimum*, Suballiance

6: *Archontophoenix–Livistona*, Suballiance 23: *Ficus–Streblus–Dendrocnide–Cassine*, Suballiance 24: *Castanospermum–Grevillea robusta*, Suballiance 25: *Streblus–Austromyrtus*, Suballiance 26: *Waterhousea floribunda–Tristaniopsis lauriana* and Suballiance 33: *Ceratopetalum/Schizomeria–Heritiera/Sloanea* also occur. These alliances are not restricted to lowland floodplains.

11. In any individual stand more than one Suballiance may be represented, and separation of Suballiances may, in some instances, be difficult as complex intergradations occur.
12. The following vertebrate species occur in, but are not restricted to, lowland rainforest on floodplains.

Birds

<i>Ailuroedus crassirostris</i>	Green Catbird
<i>Alectura lathamii</i>	Brush Turkey
<i>Colluricincla megarhyncha</i>	Little Shrike-thrush
<i>Ptilinopus magnificus</i>	Wompoo Fruit Dove
<i>Sericornis citreogularis</i>	Yellow-throated Scrubwren
<i>Tregellasia capito</i>	Pale Yellow Robin

Mammals

<i>Dasyurus maculatus</i>	Spotted-tailed Quoll
<i>Kerivoula papuensis</i>	Golden-tipped Bat
<i>Nyctimene robinsoni</i>	Eastern Tube-nosed Bat
<i>Potorous tridactylus</i>	Long-nosed Potoroo
<i>Pteropus</i> spp.	Flying-foxes
<i>Syconycteris australis</i>	Eastern Blossom Bat
<i>Thylogale stigmatica</i>	Red-legged Pademelon
<i>Thylogale thetis</i>	Red-necked Pademelon

Reptiles

<i>Hypsilurus spinipes</i>	Southern Angle-headed Dragon
<i>Saiphos equalis</i>	Three-toed Skink

13. A number of stands of the Community are found within the formal conservation reserves in the National Parks and Wildlife Service estate listed below, however the size of individual stands is small (only a few hectares). These stands are only a small proportion of the total distribution of the Community.

Andrew Johnston Big Scrub Nature Reserve
 Boatharbour Nature Reserve
 Brunswick Heads Nature Reserve
 Coocumbac Island Nature Reserve

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Coramba Nature Reserve
Hortons Creek Nature Reserve
Moore Park Nature Reserve
Stotts Island Nature Reserve
Susan Island Nature Reserve

14. The small and fragmented nature of these sites places them, as with stands outside NPWS estate, at risk of loss of integrity from weed invasion and other disturbances.
15. In the light of 2, 3, 4, 5, 6 and 14 the Scientific Committee is of the opinion that Lowland Rainforest on Floodplain within the New South Wales North Coast bioregion is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Associate Professor Paul Adam
Deputy Chairperson
Scientific Committee

BY AUTHORITY