



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 and, accordingly, that Schedule is amended as set out in Annexure “A” to this Notice:

Sydney Coastal River-flat Forest (as described in the final determination of the Scientific Committee to list the ecological community)

The final determination, set out in Appendix “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 the circumstances and factors threatening its survival or evolutionary development 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 5th day of January 1999.

Dr Chris Dickman

Chairperson  
Scientific Committee

**Annexure “A”**

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

Sydney Coastal River-flat Forest (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 Sydney Coastal River-flat Forest as an endangered ecological community.

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**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 Sydney Coastal River-Flat Forest as an ENDANGERED ECOLOGICAL COMMUNITY on Part 3 of Schedule 1 of the Threatened Species Conservation Act. Listing is provided for by Part 2 of the Act.

The Scientific Committee has found that:

1. The Sydney Coastal River-Flat Forest (SCRFF) is the name given to the plant community that is characterised by the following assemblage of species:

<i>Acacia binervia</i>	<i>Acacia filicifolia</i>
<i>Acacia floribunda</i>	<i>Acacia parramattensis</i>
<i>Acmena smithii</i>	<i>Adiantum aethiopicum</i>
<i>Alphitonia excelsa</i>	<i>Angophora floribunda</i>
<i>Angophora subvelutina</i>	<i>Backhousia myrtifolia</i>
<i>Breynia oblongifolia</i>	<i>Bursaria spinosa</i>
<i>Callistemon salignus</i>	<i>Casuarina cunninghamiana</i>
<i>Casuarina glauca</i>	<i>Cayratia clematidea</i>
<i>Centella asiatica</i>	<i>Clematis aristata</i>
<i>Clematis glycinoides</i>	<i>Commelina cyanea</i>
<i>Dichondra repens</i>	<i>Doodia aspera</i>
<i>Duboisia myoporoides</i>	<i>Einadia hastata</i>
<i>Eucalyptus amplifolia</i>	<i>Eucalyptus baueriana</i>
<i>Eucalyptus benthamii</i>	<i>Eucalyptus botryoides/salinga</i>
<i>Eucalyptus deanei</i>	<i>Eucalyptus elata</i>
<i>Eucalyptus tereticornis</i>	<i>Eucalyptus viminalis</i>
<i>Eustrephus latifolius</i>	<i>Geitonoplesium cymosum</i>
<i>Geranium homeanum</i>	<i>Glochidion ferdinandi</i>
<i>Hydrocotyle peduncularis</i>	<i>Hymenanthera dentata</i>

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<i>Hypolepis muelleri</i>	<i>Imperata cylindrica</i>
<i>Leptospermum polygalifolium</i>	<i>Lomandra longifolia</i>
<i>Melaleuca linariifolia</i>	<i>Melaleuca stypheliodes</i>
<i>Melia azedarach</i>	<i>Microlaena stipoides</i>
<i>Oplismenus aemulus</i>	<i>Pandorea pandorana</i>
<i>Parsonsia straminea</i>	<i>Persciaria decipiens</i>
<i>Phyllanthus gasstroemii</i>	<i>Pratia purpurascens</i>
<i>Pteridium esculentum</i>	<i>Rubus parvifolius</i>
<i>Stellaria flaccida</i>	<i>Stephania japonica</i>
<i>Stipa ramosissima</i>	<i>Stipa verticillata</i>
<i>Themeda australis</i>	<i>Trema aspera</i>
<i>Tristaniopsis laurina</i>	<i>Viola hederacea</i>
<i>Wahlenbergia gracilis</i>	

2. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed in 1 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site and by its recent disturbance history. The number of species and the above-ground composition of species will change with time since fire, and may also change in response to changes in fire frequency.
3. The structure of the community was originally forest, but as a result of partial clearance may now exist as woodland or as groups of remnant trees.
4. Characteristic tree species in the SCRFF are *Acacia parramattensis*, *Angophora floribunda*, *Angophora subvelutina*, *Eucalyptus amplifolia*, *Eucalyptus baueriana*, *Eucalyptus deanei*, *Eucalyptus elata*, *Eucalyptus tereticornis*. Tree species composition varies between sites depending on geographical location and local conditions (e.g. topography, rainfall, exposure).
5. SCRFF has been recorded from the local government areas Bankstown, Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Parramatta, Penrith and Sutherland.

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6. SCRFF typically is associated with rivers and creeks and occurs on the riparian zone and on associated floodplains, terraces and flats on alluvial soils, that is, sand silt and clay of fluvial origin. Its main areas of occurrence are associated with the Hawkesbury-Nepean, Georges and Woronora Rivers and their tributaries.
  7. SCRFF includes the riverflatforests of the Hawkesbury-Nepean River as referred to in Benson & Howell (1990), Benson, Howell & McDougall (1996) and the Swamp Oak Forest, Red Gum-Cabbage Gum Forest, Blue Gum Forest, Swamp Mahogany Forest, River Peppermint Forest, River Oak Forest, Cabbage Gum-Broad-leaved Apple Forest, Camden White Gum Forest, Blue Gum/Bangalay-Peppermint-Blue Box Forest and River Peppermint Forest of UBBS (1997). It includes but is not restricted to vegetation described as map units 6d and 9f of Benson (1992).
  8. SCRFF provides habitat for a number of plant species recognised as being of regional conservation significance in UBBS (1997). These include:

<i>Adiantum formosum</i>	<i>Asterolasia correifolia</i>	<i>Blechnum indicum</i>
<i>Cyclosorus interruptus</i>	<i>Echinochloa colona</i>	<i>Eucalyptus baueriana</i>
<i>Eucalyptus benthamii</i>	<i>Eucalyptus elata</i>	<i>Glyceria australis</i>
<i>Panicum obseptum</i>	<i>Pellaea falcata</i> var <i>nana</i>	<i>Persicaria prostrata</i>
<i>Pratia concolor</i>	<i>Pultenaea viscosa</i>	<i>Scutellaria humilis</i>
<i>Senna odorata</i>	<i>Seringia arborescens</i>	<i>Synoum glandulosum</i>
<i>Syzygium oleosum</i>	<i>Tylophora paniculata</i>	

9. SCRFF has an understorey that may be either grassy and herbaceous or of a shrubby sclerophyll to mesophyll or viney nature. SCRFF can have a dense understorey in areas that have not been burnt for an extended period of time.
10. Adjacent communities on sandstone soils are generally part of the Sydney Sandstone Complex, on shale soils are Cumberland Plain Woodlands and on Tertiary alluvium are Castlereagh Woodlands. In estuarine areas on saline soils Communities dominated by *Casuarina glauca* (Benson & Howell 1990) occur, however these Communities have a different understorey and are not part of the SCRFF.

11. Because of the fertile nature of river flat soils, most of the SCRFF has been cleared for agriculture and intensive development, and SCRFF now exists as remnants generally in cleared agricultural country.
12. Only small areas of SCRFF are presently included in conservation reserves including Cattai National Park, Dharug National Park, Georges River National Park, Scheyville National Park, Gulguer Nature Reserve, Mulgoa Nature Reserve and Marramarra National Park.
13. Large areas of SCRFF have been cleared for agriculture, mining and other development. Remnants are small and scattered. Identified threats include weed invasion, grazing and mowing, clearing, physical damage from recreational activities, rubbish dumping.
14. In view of the small size of existing remnants, the threat of further clearing and other threatening processes, the Scientific Committee is of the opinion that the Sydney Coastal River-Flat Forest 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 and is eligible for listing as an endangered ecological community.

Dr Chris Dickman  
Chairperson  
Scientific Committee

## References

- UBBS (1997) *Urban Bushland Biodiversity Survey* (NSW National Park and Wildlife Service: Hurstville).
- Benson, D. & Howell, J. (1990) *Taken for granted: the bushland of Sydney and its suburbs*. (Kangaroo Press: Kenthurst).
- Benson, D. (1992) The natural vegetation of the Penrith 1:100000 map sheet. *Cunninghamia* 2(4):541–596.
- Benson, D., Howell, J. & McDougall, L. (1996) *Mountain Devil to Mangrove*. (Royal Botanic Gardens Sydney).