

Approved Conservation Advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
***Eucalyptus conglomerata* (Swamp Stringybark)**

This Conservation Advice has been developed based on the best available information at the time this Conservation Advice was approved; this includes existing plans, records or management prescriptions for this species.

**Description**

*Eucalyptus conglomerata*, Family Myrtaceae, also known as Swamp Stringybark, is a mallee or small tree to 12 m high. The bark is persistent almost throughout, coarsely fibrous and furrowed (a stringybark), and is grey to brownish in colour. Branches are smooth and white and less than 2 cm in diameter. The adult leaves are lance-shaped or elliptical, 13–30 mm wide, not pendulous, the same colour on both sides. The flowers are formed in the leaf axils, in groups of 13–20 and flower buds are egg-shaped, 5–8 mm long, without stalks. The fruit is cup-shaped, 3.5–6 mm long, with 3 cavities, and the valves are below rim level (Brooker & Kleinig, 2004).

**Conservation Status**

Swamp Stringybark is listed as **endangered**. This species is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as endangered under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). It is also listed as endangered under the *Nature Conservation Act 1992* (Queensland).

**Distribution and Habitat**

Swamp Stringybark is known from ten locations and 22 populations between Kin Kin and Beerwah in southern Queensland, and the total number of plants is estimated at 1100 (Drake, 1995). This species occurs within the South East Queensland Natural Resource Management Region.

The species typically grows on the margin between open forest and heathland, on deep sandy acidic soils. Drainage is generally poor and soils can be seasonally waterlogged (Drake, 1995; Halford, 1998). Some populations occur in areas of remnant vegetation (Environmental Protection Agency, 2008) as defined under the *Queensland Vegetation Management Act 1999*, and these are currently protected from broad-scale clearing. Approximately one third of populations occur on private land (Drake, 1995). There have been three more recent records from conservation reserves (Queensland Herbarium, 2008).

The distribution of Swamp Stringybark is not known to overlap with any EPBC Act-listed threatened ecological communities.

**Threats**

The main identified threats to Swamp Stringybark are clearing for agriculture, drainage works, urban development and road construction (Drake, 1995).

The main potential threats to the species are impacts from adjacent uses where the populations adjoin urban areas or other developed land; effects of nutrient-laden and polluted run-off; weed infestations such as Groundsel Bush (*Baccharis halimifolia*) and exotic grasses; and too-frequent burning (Drake, 1995).

### **Research Priorities**

Research priorities that would guide future regional and local priority actions include:

- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.
- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations, particularly in the Cooloola section of Great Sandy National Park (Drake, 1995).
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.
- Investigate the genetic diversity of the species, especially whether variation in the Maroola population is a response to environmental conditions (Drake, 1995).

### **Regional Priority Actions**

The following regional priority recovery and threat abatement actions can be done to support the recovery of Swamp Stringybark.

#### **Habitat Loss, Disturbance and Modification**

- Monitor known populations to identify key threats.
- Identify populations of high conservation priority.
- Ensure road construction and widening and maintenance activities (or other infrastructure or development activities) involving substrate or vegetation disturbance in areas where Swamp Stringybark occurs do not adversely impact on known populations.
- Manage any changes to hydrology which may result in changes to the water table levels, increased run-off, sedimentation or pollution.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.

#### **Fire**

- Identify appropriate intensity and interval of fire to promote seed germination and vegetation regeneration.
- Provide maps of known occurrences to land managers and local and state Rural Fire Services and seek inclusion of mitigation measures in bush fire risk management plans, risk register and/or operation maps.

#### **Conservation Information**

- Raise awareness of Swamp Stringybark within the local community.

#### **Enable Recovery of Additional Sites and/or Populations**

- Undertake appropriate seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations.
- Implement national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.

### **Local Priority Actions**

The following local priority recovery and threat abatement actions can be done to support the recovery of Swamp Stringybark.

#### **Habitat Loss, Disturbance and Modification**

- Minimise adverse impacts from land use at known sites.
- Manage any disruption to water flows.

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- Protect populations of the listed species through the development of conservation agreements and/or covenants.

#### Invasive Weeds

- Identify and remove weeds in the local area, which could become a threat to Swamp Stringybark, using appropriate methods.
- Manage sites to control and prevent introduction of invasive weeds, which could become a threat to the species, using appropriate methods.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on Swamp Stringybark.

#### Fire

- Implement an appropriate fire management regime for local populations, with particular attention to fire frequency..

This list does not necessarily encompass all actions that may be of benefit to Swamp Stringybark, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

#### **Existing Plans/Management Prescriptions that are Relevant to the Species**

- Conservation Research Statement and Proposed Recovery Plan for *Eucalyptus conglomerata* (Swamp Stringybark), Myrtaceae (Drake, 1995).

This prescription was current at the time of publishing; please refer to the relevant agency's website for any updated versions.

#### **Information Sources:**

Brooker, MIH, & Kleinig, DA 2004, *Field Guide to Eucalypts*, vol. 3, 2<sup>nd</sup> edition, Bloomings Books, Melbourne.

Drake, WE 1995, 'Conservation Research Statement and Proposed Recovery Plan for *Eucalyptus conglomerata* (Swamp Stringybark), Myrtaceae', report submitted to the Australian Nature Conservation Agency Endangered Species Program.

Environmental Protection Agency 2008, *Copy of the certified regional ecosystem map for the purpose of the Vegetation Management Act 1999*, online RE Maps, Environmental Protection Agency, Brisbane, viewed 21 April 2008 <<http://www.epa.qld.gov.au/REMAP>>.

Halford, D 1998, '*Eucalyptus conglomerata* Species Management Profile', Species Management Manual, Department of Natural Resources, Brisbane.

Queensland Herbarium 2008, specimen label information, viewed 6 May 2008.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia* (2<sup>nd</sup> ed.), Australian Network for Plant Conservation, Canberra.