

**Advice to the Minister for Sustainability, Environment, Water, Population and Communities
from the Threatened Species Scientific Committee (the Committee)
on Amendment to the list of Threatened Species
under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)**

1. Reason for Conservation Assessment by the Committee

This advice follows assessment of new information provided through the Species Information Partnership with Western Australia on:

***Lysiosepalum abollatum* (woolly lysiosepalum)**

2. Summary of Species Details

Taxonomy	Conventionally accepted as <i>Lysiosepalum abollatum</i> C.F.Wilkins
State Listing Status	Listed as Declared Rare Flora under the Western Australian <i>Wildlife Conservation Act 1950</i> . Managed as critically endangered by the Western Australian Government.
Description	A dense, erect shrub that can grow to 1.5 m high. White woolly hairs cover young growth and inflorescences. The leaves are small, narrow and mid-green in colour with hairs covering both sides. Inflorescences are between 40 mm and 90 mm in length, and contain up to eight flowers with flat, dark pink petals. The petals are surrounded by an enlarged, ovate to elliptic calyx (whorl of sepals) that is mauve to pink in colour. The flowering period is from August to September (Western Australian Herbarium, 2006; DEC, 2008).
Distribution	Endemic to Western Australia and is known from a single population in the Wongan Hills area, approximately 180 km north-east of Perth. The species occurs on private property (DEC, 2009). Translocation of this species was undertaken in 2009. The site of the translocated population is located within the Wongan Nature Reserve, approximately 2.5 km north of the natural population (DEC, 2009).
Relevant Biology/Ecology	The species grows under open mallee-heath in orange-brown, sandy clay over laterite, at the base and lower slopes of hills. It is associated with <i>Eucalyptus ebbanoensis</i> (sandplain mallee), <i>Acacia pharangites</i> (Wongan Gully wattle) and <i>A. congesta</i> subsp. <i>wonganensis</i> with an understorey of <i>Halgania</i> , <i>Allocasuarina</i> , <i>Leptospermum</i> and <i>Hibbertia</i> species (DEC, 2008).
Threats <i>Known</i>	The clearing of land for agriculture has reduced the amount of potential habitat for the species (DEC, 2009). It is likely that the species once occurred over a larger range, as some areas of bushland habitat surrounding the population have been cleared (DEC, 2008). Soil erosion threatens the population. Surface water travels downslope where it removes soil and disrupts the soil seed bank, which may have a detrimental impact on recruitment (DEC, 2009).

	Grazing and digging by rabbits and kangaroos is a known threat to the species and its habitat (DEC, 2009).
<i>Potential</i>	Inappropriate fire regimes are a potential threat to the species (DEC, 2009).

3. Public Consultation

Notice of the proposed amendment was made available for public comment for 30 business days. No comments were received.

4. How judged by the Committee in relation to the EPBC Act criteria and Regulations

Criterion 1: It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers.

Not eligible

Criterion element	Evidence
Reduction in numbers	Not substantial — The species population size was recorded as 109 mature plants in 1999, and in 2007 the number of mature plants was 89, representing an 18% reduction in population size (DEC, 2009).

Criterion 2: Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited.

Eligible for listing as critically endangered

Criterion element	Evidence
Geographic distribution AND	Very restricted – The area of occupancy for the single population is 0.5 km ² , and its extent of occurrence is 1 km ² (DEC, 2009).
Geographic distribution precarious	Yes – The species exists at a single location and continued decline is inferred due to ongoing threats (DEC, 2009). A translocation of 34 plants of this species was undertaken in 2009, approximately 2.5 km north of the natural population. It is not known whether the plants in this translocated population will survive to maturity and reproduce (DEC, 2009).

Criterion 3: The estimated total number of mature individuals is very low, low or limited; **and either**
 (a) evidence suggests that the number will continue to decline at a very high, high or substantial rate; **or**
 (b) the number is likely to continue to decline **and** its geographic distribution is precarious for its survival.

Eligible for listing as critically endangered

Criterion element	Evidence
Total no. of mature individuals AND	Very low – 89 mature plants (DEC, 2009).
Continued rate of decline	No data.

OR	
Total no. of mature individuals	Very low – 89 mature plants (DEC, 2009).
AND	
Continued decline likely	Yes – see Criterion 2.
AND	
Geographic distribution precarious	Yes – see Criterion 2.

Criterion 4: The estimated total number of mature individuals is extremely low, very low or low.

Eligible for listing as endangered

Criterion element	Evidence
Total no. of mature individuals	Very low – 89 mature plants (DEC, 2009).

Criterion 5: Probability of extinction in the wild that is at least
 (a) 50% in the immediate future; or
 (b) 20% in the near future; or
 (c) 10% in the medium-term future

Not eligible

Criterion element	Evidence
Probability of extinction in the wild	No data.

5. Recovery Plan

There should not be a recovery plan for the woolly lysiosepalum as the approved conservation advice for the species provides sufficient direction to implement priority actions and mitigate against key threats.

The Committee notes that the following state recovery plan was prepared by the Western Australian Department of Environment and Conservation: Woolly Lysiosepalum (*Lysiosepalum abollatum*) Interim Recovery Plan 2008–2013 (DEC, 2008).

6. Recommendations

(i) The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **including** in the list in the **critically endangered** category:

Lysiosepalum abollatum

(ii) The Committee recommends that there should not be a recovery plan for this species.

Threatened Species Scientific Committee

1 June 2010

References cited in the advice

Department of Environment and Conservation (DEC) (2008). Woolly lysiosepalum (*Lysiosepalum abollatum*) interim recovery plan 2008–2013. Interim Recovery Plan No. 280 Department of Environment and Conservation, Western Australia.

Viewed: 1 February 2010

Available on the Internet at:

www.dec.wa.gov.au/index.php?option=com_content&task=view&id=865&Itemid=2009#flora

Department of Environment and Conservation (DEC) (2009). Records held in DEC's declared flora database and rare flora files. Department of Environment and Conservation, Western Australia.

Western Australian Herbarium (2006). FloraBase – The Western Australian flora. Department of Conservation and Land Management.

Available on the Internet at: <http://florabase.calm.wa.gov.au/>