

DEPARTMENT OF NATURAL RESOURCES

Report under the NV Act 2003 in relation to the use of more appropriate local data (Section 2.4.3 of the Environmental Outcomes Assessment Methodology)

3 August 2006

Accreditation No. 30628

PVP reference No. 690

Re: fieldwork undertaken on 2 / 8 / 2006 for inspection of hollow bearing trees within a PVP application area for sand mining near Mendooran.

I was undertaking this work in my capacity as being an accredited expert in biodiversity / threatened species (no. 30628) for the purposes of clause 27(4) of the *Native Vegetation Regulation 2005*.

On the date in question I undertook an inspection of the PVP area with you in order to ascertain the following information.

- To search the 1.8ha clearing site for 5cm hollows that could provide nesting for the Turquoise Parrot.
- If any hollow-bearing trees are identified they will need to be located and marked with tape and paint to ensure they are not to be cleared.
- A sufficient area around each tree will need to be determined that will not be mined in order to prevent the trees with hollows from being killed by the mining process.
- If applicable, to also look at changing the shape of the 1.8ha to allow for these trees with hollows to be kept and some others without hollows to be removed.
- To provide a list of key species for the rehabililitation of the site after mining.

The area was walked over and all trees inspected for hollows. Two trees within the mining area were identified as bearing hollows. A red gum (possibly Baradine Gum *Eucalyptus chloroclada*) and a Rough-barked Angophora *Angophora floribunda* were found with several hollows each, some in the 5cm entrance diameter range that is preferred by the Turquoise Parrot for nesting. Both of these trees were located by GPS co-ordinates and were marked by red tape to allow for future identification for retention.

After discussion with you we agreed that the drip-line of the tree canopy would be the most consistent application of an area around each tree that needs to be retained from mining in order to maintain the tree in its current state of health. In simple terms this means the area underneath the tree canopy cannot be mined, thus providing a buffer zone around the trunk.

A brief inspection was made of the vegetation immediately north of the proposed mine area to ascertain if any trees there were hollow-bearing. I did not find any such trees present. Therefore, if there is a need to compensate the retained area around the identified trees, there is some potential to change the shape of the proposed mining area to include additional areas immediately north of the existing proposal.

With regards to future rehabilitation of the site, I believe that little actual revegetation by planting is required due to the following factors. Firstly, the proposed mining area is very small compared to the remaining area of sand monkey habitat on the property. The groundcover floristic diversity was

relatively low at the time of inspection and there was an abundance of exotic species. It is my belief that there would be great difficulty in purchasing seedlings of the shrubs and groundcover that are native to the area as most are not cultivated or grown for sale.

The tree species present on the majority of the area (White Cypress Pine *Callitris glaucophylla*, Rough-barked Angophora) are very common to the region. Baradine Gum is the only other tree species noted on the area but it occurred mainly on the footslopes of the sand monkey which are unlikely to be mined. I consider the probability of natural seed set occurring on the rehabilitated area

after mining to be very high as the bulk of the sand monkey habitat is located immediately adjacent to the proposal area.

Inspection of the adjacent sand monkey area showed several plants of Silver Banksia *Banksia marginata* in addition to similar trees already occurring on the proposed mining area. Therefore, if the proponent is required to actively revegetate the area after mining, it would be my recommendation that planting should be limited to tree species only (as natural seed set should recover all existing groundcover and shrub species to pre-mining levels). Plantings should consist of scattered seedlings of Rough-barked Angophora and Silver Banksia throughout the mined area at spacings equivalent to that found in the immediately adjacent intact vegetation. If further plantings are required then Baradine Gum should be located at intervals along the outer edges of the mining area (ie. on the pre-mining footslopes areas where such species are currently located).

Regional Ecologist, Department of Natural Resources.