

Appendix 1 Parkes

Native vegetation

Two distinct Plant Community Types (PCTs) were observed in the study area. These include:

- Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW Western Slopes and Riverina Bioregions.
- Western Grey Box – Poplar Box – White Cypress Pine tall woodland on red loams mainly of the eastern Cobar Penneplain Bioregion

Both of these PCTs are listed as the EEC Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Penneplain, Nandewar and Brigalow Belt South Bioregions.

Threatened Species

Six threatened species were returned by the BCC assessment as requiring targeted survey (and therefore with potential to generate species credits) were considered to have some potential to occur in the project. These include the following:

- Pine Donkey Orchid (*Diuris tricolor*), listed as vulnerable under the TSC Act.
- Spear-grass (*Austrostipa wakoolica*), listed as endangered under the TSC Act and EPBC Act.
- Slender Darling Pea (*Swainsona murrayana*), listed as vulnerable under the TSC Act and EPBC Act.
- Eastern Pygmy-possum (*Cercatetus nanus*), is listed as vulnerable under the TSC Act.
- Koala (*Phascolarctos cinereus*), listed as vulnerable under the TSC Act and EPBC Act.
- Grey Falcon (*Falco hypoleucos*), listed as endangered under the TSC Act and EPBC Act.

Two threatened fauna species and one plant, listed as matters of National Environmental Significance (NES) under the EPBC Act were considered with potential to be impacted by the proposal. These species included:

- Koala (*Phascolarctos cinereus*)
- Superb Parrot (*Polytelis swainsonii*)
- Spear-grass (*Austrostipa wakoolica*)

Impact assessments were undertaken for these species, concluding a very low likelihood of significant impact.

Management

- EEC areas to be retained would be delineated, and construction activities would be excluded from these areas (Figure 1)
- Maintain and enhance the Inland Grey Box Woodland EEC located within the project site.
- Minimise clearing of EECs, namely 'White Box–Yellow Box–Blakely's Red Gum Woodland'. Clearing and construction contractors should be given inductions that make clear the importance of the sensitive area habitat and its species (Figure 4)
- Where trees are to be retained, an adequate tree protection zone (TPZ) will be provided around each tree for the duration of construction from construction activities, including excavation, vehicle parking and stockpiles. Details for calculating TPZs are provided within Australian Standard 4970- 2009 – Protection of trees on development sites.



Figure 1: Parkes - Few patches of trees, one tree line and 4 dams to be retained

Results of Tree Assessment

15 hollow bearing trees (HBT's) were identified throughout the project site (see HBT map). There were 9 Grey Box (*Eucalyptus microcarpa*), 2 Yellow Box (*E. melliodora*), 1 Bimble Box (*E. populnea*), 1 Blakelys Red Gum (*E. blakelyi*), 1 *Cassurina sp.* and 1 White Callitris (*Callitris columellaris*). A summary table of the habitat values for these trees is provided as an appendix to this document.

The patch of Grey Box (*Eucalyptus microcarpa*) in the centre of the project area will be retained. However, HBT's 1, 2, 3, 4, 14 and 15 are likely to be removed due to their position in the solar array layout.

Requirements

- A qualified ecologist with animal handling experience be present before and during tree clearing.
- The ecologist will inspect the tree immediately prior to clearing for any evidence of animal activity.
- Upon felling the ecologist would inspect the tree closely. Should any injured animals be present, the ecologist would place them into a safe bag or box and take them to the vet or wires.

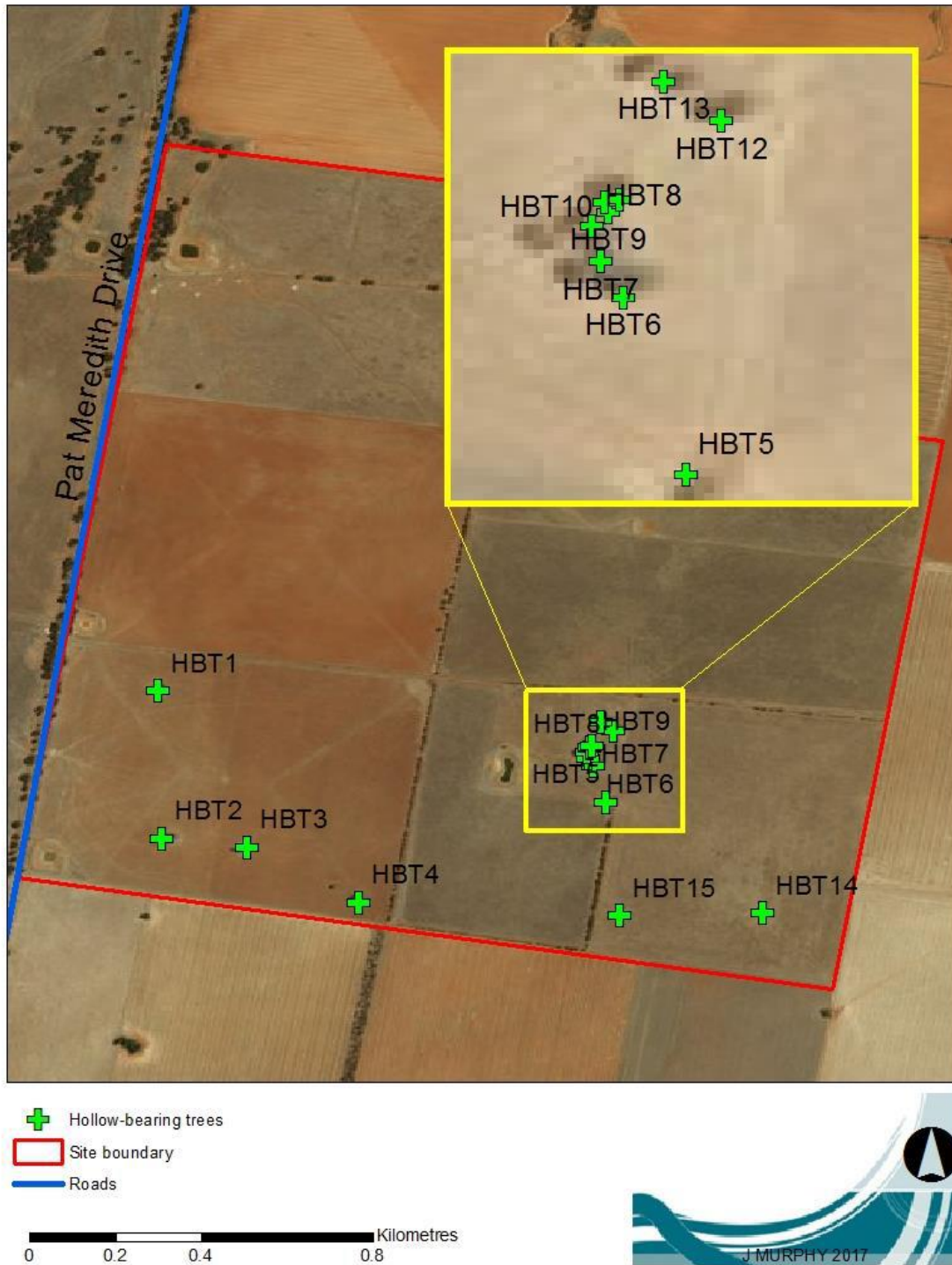


Figure 2 - HBT Map

Tree ID	Common Name	Species	Diameter at breast height (DBH)(cm)	Height (m)	Number of hollows	Type of hollow	Size of hollow	Hollow entrance shape	Height from ground (m)	Suitability/evidence of fauna
1	Grey Box	<i>Euclayptus microcarpa</i>	100	12	5	broken branches	small	round	5 to 10	A pair of parrots in tree magpies nest
2	Yellow Box	<i>Eucalyptus melliodora</i>	150	15	4	broken branches	small	round	6 to 10	Scats at entrance to hollows
3	Bimble Box	<i>Eucalyptus populnea</i>	130	10	4	trunk/broken branch	3 small 1 large	round and elongate	1.5	small scats in entrance Fox at base of tree
4	Yellow Box	<i>Eucalyptus melliodora</i>	120	14	3	broken branches	small	round	5 to 10	magpies nest
5	She oak	<i>Casuarina sp.</i>	60	8	1	broken branches	small	round	3	
6	Grey Box	<i>Euclayptus microcarpa</i>	100	10	2	broken branches	small	round	6	
7	Grey Box	<i>Euclayptus microcarpa</i>	50	10	1	broken trunk/branch	medium	elongate	1.5	leaf litter nest material inside
8	Grey Box	<i>Euclayptus microcarpa</i>	50	10	1	base hollow	large	round	0	
9	Grey Box	<i>Euclayptus microcarpa</i>	40	10	2	broken branch/trunk ground	1 small 1 large	round and elongate	7 to 10	
10	Grey Box	<i>Euclayptus microcarpa</i>	100	10	1	trunk	small	round	2	magpies nest bird scats at base
11	Grey Box	<i>Euclayptus microcarpa</i>	100	10	1	broken branch	small	round	9	
12	Grey Box	<i>Euclayptus microcarpa</i>	50	8	1	broken branch	small	round	8	
13	Grey Box	<i>Euclayptus microcarpa</i>	80	10	2	broken branch	small	round	8	
14	Blakelys Red Gum	<i>Eucalyptus blakelyi</i>	160	13	4	broken branch	small	round	8 to 10	magpies nest feathers and droppings on ground
15	White Cypress	<i>Callitris columellaris</i>	60	10	2	trunk	small	round	6 to 8	bird scats present

Figure 3 – HBT Assessment and Records

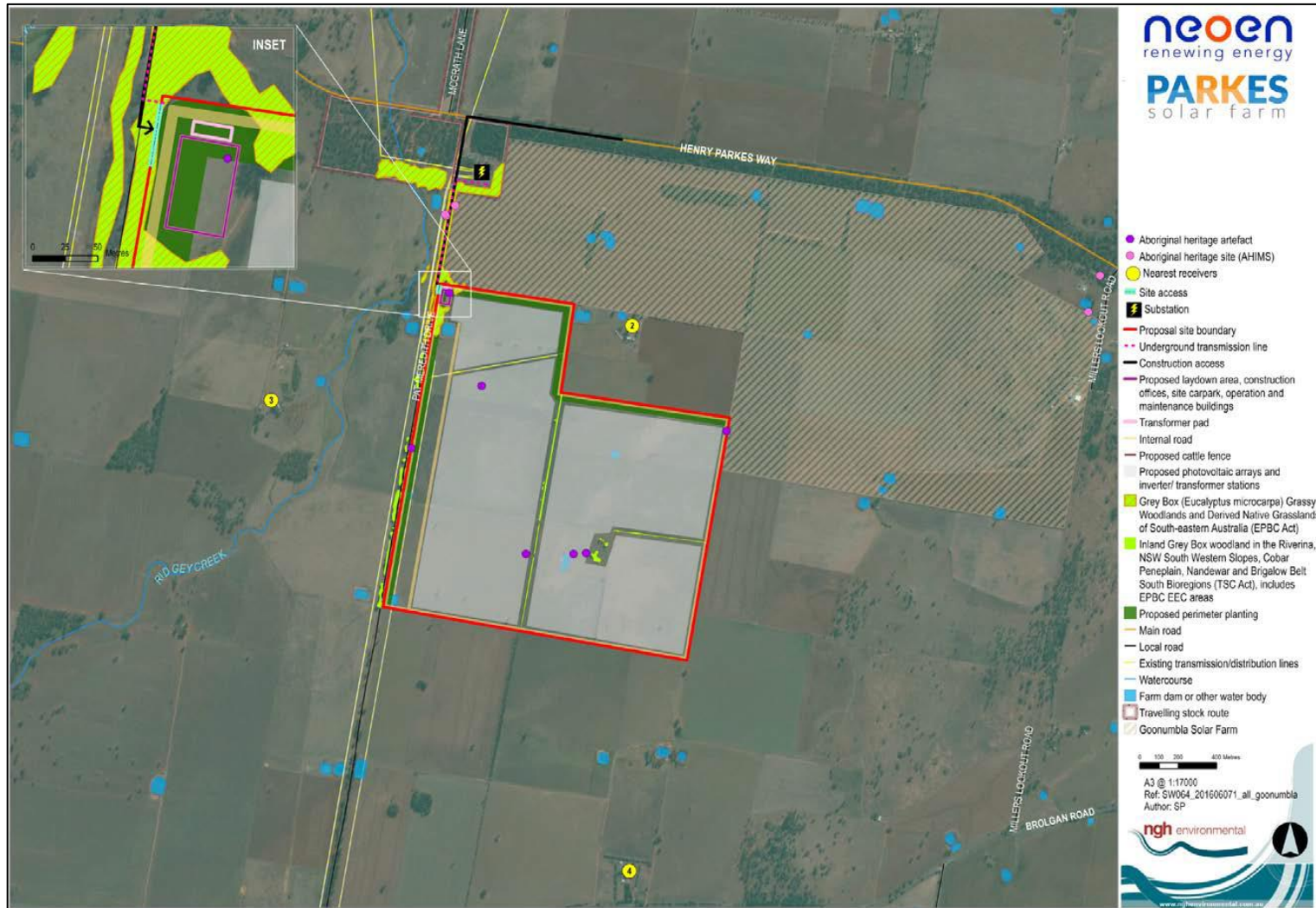


Figure 4: Parkes Biodiversity Map