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ATTENTION: FIONNUALA HANNON

### FAUNA HABITATS OF WASHDOWN SITE ON MURRAY ROAD AND GRAVEL PIT #6

1. Proposed Murray Road heavy machinery washdown exit road.

I examined this site for one hour on 22 February 2011. According to my advice on site the assessment was required of an easement some 100m x 20m for the exit road from the washdown pad, not the pad itself as the proposed site is previously disturbed.



The vegetation is a very open mallee with *Eucalyptus buprestium* and *E. pleurocarpa* on grey-white loamy sand. Medium height shrubs were *Hakea corymbosa*, *Allocasuarina humilis*, *Calothamnus gracilis* and *C. ?villosus* over lower shrubs *Bankisia repens*, *Beaufortia micrantha*, *Daviesia reversifolia* and *Taxandria spathulata*. The vegetation is largely undisturbed though there is an old cleared access along the north side of the easement. It appears more open than adjacent vegetation; I believe this is natural.

#### Site of required clearing of vegetation for exit road

Birds recorded were only Tawny-crowned Honeyeater. Other fauna: Western Grey Kangaroo (scats only) and Echidna (scratching only). The tenure of the land is presumed to be the Murray Road road reserve. The area involved is approximately 0.2 ha.

Issues and constraints? There are no issues or constraints with the clearing of this vegetation from a fauna conservation point of view because the area is small, no critical habitats for vertebrate fauna, particularly threatened species, are present and there is adequate adjacent habitat to accommodate any fauna displaced. Further, the habitat type is represented extensively elsewhere including in Fitzgerald River National Park.

## 2. Proposed gravel pit #6

I examined this site for 3.5 hours on 22/02/2011. I walked the perimeters of the site and one diagonal in this time. The vegetation is a mixed, dense, plant species rich assemblage of mallee and tall shrubs with a lower shrub understorey. On deeper sands *Eucalyptus buprestium* and *E. decipiens* are present with occasional *Nuytsia floribunda*, *Exocarpus aphyllus* and abundant *Lambertia inermis* and *Hakea crassifolia*. Lower shrubs are *Hakea victoria*, *Banksia pulchella*, *Petrophile ericifolia*, *Adenanthos cuneatus* and *Isopogon trilobus*. Lower in the landscape on heavier (i.e. with more sandy clay loam soils) *E. incrassata* and *E. pleurocarpa* are present with *Hakea corymbosa*, *B. cirsioides*, *B. dryandroides*, *B. repens* and *Beaufortia micrantha*.

On gravelly sands near the previous gravel pit site the vegetation is typically *E. pleurocarpa* and *E. buprestium* mallee over shrubs *Grevillea tripartita*, *Adenanthos cuneatus*, *Hakea victoria*, *Melaleuca striata*, *Banksia baueri* and *Caustis dioica*. Deeper sands south east of the gravel pit host a tall shrubland of *B. baxteri* and *L. inermis* with *H. victoria*.



Dense shrubland south east of gravel pit



Dense shrubland at northern corner

Along the south east perimeter of the proposal there is some laterite outcropping and separate occurrences of *B. baueri* and *B. dryandroides* heath.



*Banksia dryandroides* heath on south east perimeter



*Banksia baueri* heath on south east perimeter

The vegetation and habitats are in very good condition; the only apparent disturbances are the previous gravel pit and some weed incursion along the north west perimeter adjacent to cleared farm land. Weed species here are: *Lepidium africanum*, *Arctotheca calendula*, *Eragrostis curvula* and un-identified grasses.





Carnaby's Cockatoos at proposed gravel pit



Previous gravel pit

Note that in the gravel pit photo, that without top soil return, there is very little regrowth and what there is consists of weeds, in this case *Solanum nigrum* and grasses.

Birds recorded were: Carnaby's Cockatoo, (a small flock of three) Yellow-rumped Thornbill, Silvereye, New Holland Honeyeater, Red Wattlebird, Tawny-crowned Honeyeater, Brush Bronzewing, Emu (scat only), Red-capped Parrot, Elegant Parrot, Grey Butcherbird. Other fauna: Western Grey Kangaroo (scats only). Rabbit scats and scratches were present along the farmland interface.

The land tenure of the proposal is private freehold land (Kent location 1914), the area is to the order of 45-50 ha.

Issues and constraints? As previously noted the vegetation and habitats here are in very good condition and as such will provide habitat for far more birds than are listed above as well as reptile, mammal and frog species. The principal constraint from a fauna conservation point of view is the presence of the threatened bird Carnaby's Cockatoo; the vegetation here will certainly provide both perching and feeding opportunities for it with the abundance of highly floriferous e.g. banksias and hard seeded plants e.g. hakeas. However this constraint is mitigated in its severity by the circumstance of there being abundant similar, if not identical, protected vegetation in the near vicinity including in Fitzgerald River National Park and other crown reserves. Note that without the presence of tree hollows the proposed gravel pit will not provide breeding habitat for this species. Put another way, although the area is demonstrated to provide habitat for Cockatoos, it is not critical habitat for them.

Assuming that the entire area is not proposed for simultaneous clearing and that stockpiled topsoil will be replaced promptly, impacts on displaced fauna particularly small ground dwelling mammals, reptiles and frogs can be minimised to an acceptable standard.

Another constraint will be the requirement to obtain a clearing permit from the WA Minister for the Environment to clear native vegetation in excess of 1 ha in area.

ANDREW CHAPMAN 24 FEBRUARY 2011.