

President:

Tony Fowler

Ph: 9293-2283

fowlerak@inet.net.au

Vice President

Steve Gates

smgates@tpg.com.au

Ph: 9293 2915



P.O. Box 656

Kalamunda,

W.A., 6926

Nature Reserves Preservation Group, Inc.

Date: 7 January 2015

TO epbc.referrals@environment.gov.au

CC NRPG Committee

Subject: EPBC Ref. 2014-7389

**Title: Residential Development on Lot 608 Dixon Rd.
Kalamunda.**

This submission is made on behalf of the Nature Reserves Preservation Group (NRPG) Inc. NRPG is an umbrella environmental group within the Shire of Kalamunda. Established over 25 years ago, its main purpose is to protect the rapidly reducing areas of remnant natural vegetation within the Shire.

Habitat loss and fragmentation of habitat, under pressure from development, are the two main causes of species loss in Australia. The survival of natural areas relies on the establishment and maintenance of ecological linkages such as that provided by Lot 608. Larger areas tend to maintain their biodiversity compared with smaller areas and, are more resilient to invasive species.

The above Lot 608 forms part of a wildlife Corridor, effectively linking the Swan Coastal Plain with the Kalamunda National Park. The importance of this corridor should not be underestimated. Connectivity between areas of remnant vegetation is essential in maintaining biodiversity values in a fragmented landscape. Loss of habitat affects population movement and gene flow. Within the Perth Metropolitan area, there are few large areas of native vegetation available for conservation. Many areas of remnant bush are relatively small in size

and isolated from other conservation areas. (DEP, 2000). Fragmented ecosystems raise issues of particular concern, including:

- The impact on the movement of animals, essential to maintaining genetic diversity in plant communities by moving pollen from one remnant system to another.
- The loss of genetic diversity resulting in in-breeding.

The proposed development with its clearing will reduce the integrity of this corridor. Whilst the retention of the natural vegetation on the eastern section of Lot 608 (lot 503) as public open space may preserve the corridor function, halving its area and reducing it to a narrow strip will compromise its integrity and therefore, function. In addition, the invasion of weed species along the verges of Dixon Rd, combined with the inevitable ingress of weed species and garden escapees through dumping, from the proposed subdivision properties will, effectively, reduce what is currently a substantial wildlife corridor of bush in excellent to very good condition, to an extremely narrow, possibly unsustainable strip of good quality remnant vegetation.

Despite the referral proponent considering the proposed action as NOT a controlled action (Section 5.1), NRPG considers it to be a controlled action, in that it will have a significant impact on a listed threatened species (Matters of National Environmental Significance).

The three threatened Black Cockatoo Species are:

- Carnaby's (Short-tailed) Black Cockatoo, listed as Schedule 1 (Endangered) under the W.A. Wildlife Conservation Act and as Endangered under the EPBC Act. Carnaby's Cockatoo has declined due to loss of breeding habitat in the W.A. wheatbelt and of non-breeding, foraging habitat along the west coast, partly due to urban expansion. While small areas of foraging habitat around the metropolitan area support only small numbers of birds for short periods, the progressive loss of such small areas is an ongoing concern for this species.
- Baudin's Black Cockatoo, listed as Schedule 1 (Endangered) under the W.A. Wildlife Conservation Act and as Vulnerable under the EPBC Act.
- Forest Red-Tailed Black Cockatoo. listed as schedule 1 (Vulnerable) under the W. A. Wildlife Conservation Act and Vulnerable under the EPBC Act this species is of concern because clearing and forestry have reduced the available breeding and feeding habitat while feral bees and galahs compete with it for nesting hollows.

Addressing each level of significance of potential impact on the three threatened Black Cockatoo species, determined by the proponent (given as "...") using the Black Cockatoo Referral Guidelines, the NRPG submission will make comment in the boxed text, following each proponent claim.

The impact of the clearing on **Forest Red-Tail Cockatoo** and **Baudin's Cockatoo** is dealt with first by the proponent under the headings of:

- **Lead to a long-term decrease in the size of an important population of a species.**

“An important population is defined in the Significant Impact Guidelines 1.1 as “a population that is necessary for a species’ long-term survival and recovery” and may be “key source populations either for breeding or dispersal, populations that are necessary for maintaining

genetic diversity, and/or populations that are near the limit of the species' range... therefore the individuals that may intermittently use the site cannot be considered an important population."

Numbers of all three species of Black Cockatoos are declining. Loss of habitat through vegetation clearing and altered wildfire regimes, competition for breeding hollows from Galahs, Corellas, ducks, possums and feral European honey bees, egg poaching for the aviary trade and the actions of some orchardists, all help to promote this decline. Remnant flocks of Forest Red-tailed and Baudin's should be considered an 'important population' necessary 'for a species' long-term survival and recovery.' The limits of the species range are constantly expanding in a search for habitat, as a result of an increasing disappearance of long-established habitat through clearing.

"Forest Red-tail Cockatoos occur in the humid and sub-humid zones in south-west Western Australia extending from north of Gingin to east of Albany. They predominantly occur in forested areas but also occur on the Swan Coastal Plain."

The area where species may occur, may be considered as 'out of date' given the increasing loss of suitable habitat in regions previously available to the species for both foraging and nesting, with the resulting migration of birds in search of new habitat. Anecdotally (having lived within 5 km of this site) the increase in all black cockatoo numbers foraging in the area has markedly accelerated, as they widen their search for foraging and nesting habitat.

All three species are increasingly being forced to look for new foraging and nesting sites with the increased clearing taking place. They are increasingly to be found in wooded areas on the scarp, such as this site. The limited time available for consultants to conduct surveys, no matter how thorough the survey, can result in a report at variance with anecdotal observations from residents, made over a considerable length of time. Whilst this is in no way a criticism of the integrity of such consultant surveys, the limitations of such should be acknowledged.

"The small number of birds that would use the site for foraging is not considered to meet the criteria for an important population... therefore the proposed development on the site would not result in this outcome."

There is anecdotal evidence of the increasing use of Dixon Road habitat by all species of Black Cockatoos, in the wake of increased clearing in the wheatbelt and on the Swan Coastal Plain. This makes the case for the loss of this small area of suitable habitat having a significant impact, leading, eventually, to a long-term decrease in the size of the Forest Red-tailed and Baudin's Black Cockatoo populations.

- **Reduce the area of occupancy of an important population.**

Citing ‘Significant Impact Guidelines from the 1999 Act may be seen as inappropriate, given the rapid decline in populations of Baudin’s, Carnaby’s and Forest Red-tailed Black Cockatoo populations over the 15 year period. Whilst it is difficult to establish absolute numbers for the three, in Western Australia, the ‘Great Cockie Count’ of 2010 and 2011, conducted at night roosts in the Swan Region, show a marked decrease in observed numbers. In the 2010 report, the above population was estimated to be between 8000 and 10000. The 2011 estimates were between 5200 and 8600, a significant reduction.

“The small population that would use the site is not considered to meet the criteria for an important population. Therefore, the proposed development on the site would not result in this outcome.”

The proposed clearing for development would reduce the area of occupancy of the current Cockatoo population. Small though the populations observed as using this habitat are, these “small” populations are important, regardless of group sizes. Given that some ornithological experts consider all three Black Cockatoo species to be under threat of extinction within our lifetime and, given the increasing rate and scale of clearing of suitable habitat, remaining flocks should be considered “important populations”.

- **Disrupt the breeding cycle of an important population.**

“Forest Red-tail Cockatoos and Baudin’s Black Cockatoos do not breed on the site. It is considered that the proposed development on the site would not result in this outcome.”

Whilst no breeding has been recorded on the site, the potential for the future adoption of any of the trees as a breeding site should not be ignored. Given the rapid decline in the number of suitable breeding sites on the Swan Coastal Plain and in the Darling Range, less-than-ideal sites may need to be used by species under breeding stress. The Matiske survey (2010) identified 71 trees classified as potential breeding habitat. It also suggested that the presence of suitable hollows for Forest Red-tailed Cockatoo, Baudin’s Cockatoo and Carnaby’s Cockatoo should be confirmed by a specialist. Whilst the follow-up survey by Terrestrial Ecosystems (2014 b) failed to identify any of the hollows as suitable for Black Cockatoo breeding, the survey was a ground survey. The destruction of 71 mature potential nesting/breeding trees as a result of the development may disrupt the breeding cycle if trees destroyed are suitable (regardless of whether or not in current use by those species).

- **Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.**

“There are abundant trees for foraging including Eucalypts and Banksia woodlands within the immediate vicinity of the site in Kalamunda National Park and additional areas of bushland in

the vicinity of the site that are zoned as ‘Parks and Recreation’ that are vegetated with similar habitat such that the clearing of the small area on the site would not cause the species to decline.”

The three species of Black Cockatoo are in rapid decline. The frequent assurances that the clearing of such small areas of habitat will not add to this decline, ring hollow, given the increasing number of such small-scale clearances. Less than 5km south of the Dixon Road site, another ‘small’ area of Cockatoo habitat (currently zoned Parks and Recreation) is under threat of rezoning and subsequent clearing. Again, the specious argument that the loss of this habitat is insignificant and irrelevant to the survival of a species is used. NRPG disputes this argument.

- **Interfere substantially with the recovery of the species.**

“The population that would intermittently use the site is very small in comparison to the geographic distribution of the species, and is not an important population. Therefore any clearing of habitat on the site would not interfere substantially with the recovery of the species.”

Numbers of all three species of Black Cockatoos are declining, for reasons previously cited. Any remnant flock of Forest Red-tailed and Baudin’s, regardless of size, should be considered an ‘important population. Any clearing of suitable habitat should be seen as interfering “substantially with the recovery of the species.”

“The conclusion in this assessment in accordance with the criteria set out in Significant Impact Guidelines 1.1 is that the proposed development of 1.444ha of Lot 608 Dixon Road, Kalamunda would not have a significant impact on Forest Red-tail Cockatoos or Baudin’s Black Cockatoo.”

NRPG considers that the proposed development **would** have a significant and damaging impact on the Forest Red-tailed Cockatoo and Baudin’s Black Cockatoo populations, for reasons given above.

The impact of the clearing on Carnaby’s Black Cockatoo is also addressed against the criteria used above for the Forest Red-tailed Cockatoo and Baudin’s Cockatoo.

NRPG comments are as cited for the Red-Tailed and Baudin’s Cockatoo.

Conclusion.

Despite the retention of 1.469ha of foraging habitat, comprised of Marri, Jarrah and Banksia, within a Conservation Area of Public Open Space and the retention of 31 individual potential breeding trees (with a diameter at breast height greater than 500mm), the proposed clearing required for the development will have a deleterious effect on the Black Cockatoo population. The clearing of 1.444ha of foraging habitat and of up to 40 individual potential breeding trees including Marri, Jarrah and standing dead trees, gives cause for concern.

The 1995 Mattiske Survey (cited in the 2010 report) found evidence of several introduced species, mainly on the road verges, existing tracks, areas adjoining residential properties to the west and along the southern boundary. NRPG maintains that, whilst the harmful effect of the invasive species may be hard to quantify, clearing for a residential subdivision would, inevitably, result in invasive species being introduced. Widespread introduction of invasive species is common at any subdivision, native vegetation interface.

Such weed invasion would pose a threat to the quality of habitat on the site. Weed species and garden escapes would pose a significant threat. There is ample evidence of the damaging effect of the western subdivision activity on the site. Further damage may be expected in the wake of the proposed development.

The Nature Reserves Preservation Group considers that the proposed development of 1.444ha of Lot 608 Dixon Road Kalamunda would have a significant impact on the populations of Forest Red-tailed Cockatoo, Baudin's Cockatoo and Carnaby's Cockatoo.

Tony Fowler

President.

(08) 9293 2283