

## **Request for Minister to reconsider a decision made under section 75 of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)**

### **Background**

There is a plan in place that allows the future subdivision of Lot 9008 Ocean Rd, Dawesville. Before they progress with the subdivision, a modification to the Plan is being sought that proposes to allow the inclusion of a portion of land that previously fell within the Caddadup Waste Water Treatment Plant odour buffer. It was during a site visit assessing the impact of this modification that Council was alerted to the fact that this Lot may now provide habitat for the vulnerable western ringtail possum.

A Level 1 Flora and Fauna Assessment was carried out in July 2011 as part of the original proposal. The current modified proposal relies on that report, as does the associated EPBC decision on referral given at the time. The report of 2011 found that no conservation-significant fauna were observed within the site. Based on observations made during the site visit in July 2016, officers at the City of Mandurah believe this may have changed.

### **Initial EPBC Act Referral information – referral 2015/7462**

In section 5.2.1 CONSERVATION SIGNIFICANT AND SPECIALLY PROTECTED FAUNA of the Florida North Level 1 Flora and Fauna Assessment (Ecoscape (Australia) Pty Ltd. 2012) the habitat requirements, documented or potential presence at the site are discussed for each species that may be present at the site.

The report states with regard to *Pseudocheirus occidentalis* (Western Ringtail Possum - WRP) that “the nearest relictual population is near Harvey, approximately 40km to the south of the study area, but since 1995 DEC has translocated hundreds of displaced individuals to sites in Yalgorup National Park, where recruitment of young has been confirmed. Recent records extend to just north of Bouvard, barely 4km away on the western shore of the Harvey Estuary but de Tores (2008) considers that success of translocation efforts has not been unequivocally demonstrated.

Potential habitat may exist within the study area, as Peppermint was recorded in the vicinity of quadrat 1 and relevé 3. However, the possum does not currently occur at the study area and the reintroduced population, if ultimately viable, is unlikely to be able to extend through the urban area of Dawesville. Thus no impact on current populations or future habitat is likely to occur.”

This assumption formed the basis of the proponent’s referral to the EPBC with regard to Terrestrial Fauna and the likelihood of a significant effect on the environment. It found that investigations undertaken to date show the consequences of the likely impacts on the environment will be low.

*It is the position of the City of Mandurah that the circumstances under which those conclusions were made have changed and that the site warrants further assessment.*

### **Site Assessment**

As part of the assessment by the City of Mandurah, the proposal was referred to the Mandurah Environment Advisory Group (MEAG). A site visit was carried out on the 1<sup>st</sup> July 2016 by MEAG along with officers from the City of Mandurah to assess the potential environmental impacts of the proposed changes. During this site visit, the possibility of the site providing habitat for the Western Ringtail Possum (WRP) was raised by the discovery of a drey in a peppermint tree within the site.

A subsequent site visit by the City of Mandurah's Senior Environmental Management Officer and Allison Dixon a local fauna relocater was carried out on the 1<sup>st</sup> September 2016 to assess the site further. Allison pointed out "tipping" of peppermint leaves indicative of feeding by western ringtails that had occurred at the site of the drey. No other visible signs of western ringtail possums were found at this time. Allison returned to the site that night to spot for ringtails, vocalisations were heard but no sightings.

A further site inspection was carried out on the 4<sup>th</sup> October 2016 by Eryn Jackson along with officers of the Department of Parks and Wildlife (Geoff Barrett – Regional Ecologist and Megan Shehan - Acting Nature Conservation Officer Swan Coastal District. Investigation of the site included a targeted search around the drey but no new signs of WRP were identified. Geoff Barrett confirmed that the drey was that of a WRP but indicated that it was fairly dilapidated indicating some time since use.

The drey is located in on the southern side of the site in a section occupying a low point in the landscape. The vegetation in this part of the site consists of a closed forest of *Eucalyptus gomphocephala* over *Spyridium globulosum* open heath over *Acanthocarpus preissii*, *Desmoclados flexuosa* very open herbland/rushland. This area is approximately 0.94 ha accounting for 6.5% of the site. The vegetation was described in the Level 1 survey to be in "Very Good" condition.

The subject site is adjacent the southern boundary of Caddadup Reserve which includes a significant area of Tuart open forest over peppermint in very good to excellent condition (Mandurah 2007). Areas of sword sedge understorey occur within this reserve. This vegetation type is identified in the Background Paper to EPBC Act Policy Statement 3.10 as being one of the main habitat communities primarily used by the WRP and as such may also support a population of WRP.

While no new signs of WRP were found during this site visit, a high number of quenda diggings were observed in this part of the site indicating that this area may persist as a cooler, moister area throughout the year as quenda require either standing water or moist soil for habitat to viable (Barrett 2016 pers comm).

This along with the older evidence of WRP presence suggest that this part of the site may provide a summer refuge. WRP are known to be susceptible to heat stress and can easily overheat at temperatures of 35°C (Yin 2006). Jones et al. (1994) observed that in areas where dreys were used, western ringtail possums went to the ground over several hot days. The Department of Parks and Wildlife Ringtail Possum Recovery Plan (2014) states in section 11 Guide for decision makers; that a decrease in refuge site availability may, if occurring within habitat critical to survival have a significant impact on the WRP.

The *Commonwealth Conservation Advice for Pseudocheirus occidentalis (Western Ringtail Possum)* identifies habitat loss and fragmentation as one of the main threats to the WRP and that road traffic is a main potential threat. The proposed subdivision may result in both the loss of important habitat and increase the likelihood of WRP coming into contact with road traffic by further fragmenting habitat.

The advice also identifies threat abatement actions which may be implemented to support the recovery of the WRP. On a regional scale the re-creation, retention and improvement of habitat characteristics, including corridors is considered a priority, while at a local level it is suggested that the impacts of land development may be minimised through in-situ conservation. The use of the subject site by WRP is currently unclear but some areas within the proposed development may act as both a refuge and a corridor.

EPBC Act Policy Statement 3.10 states that currently, the overall population trend for species is declining and that in order to achieve the Australian Government's goal of ensuring the species is self-sustaining and no longer threatened, proposed actions should be designed to avoid impacts by protecting remnant habitat patches. The policy also states that translocation does not reduce the impact of an action, and is not considered to be a mitigation or offset measure for the purposes of the EPBC Act assessment. In-situ conservation and habitat augmentation is the priority for the Department of the Environment when assessing the impact of habitat loss associated with a development.

While the approved Conservation advice and Significant impact guidelines for the vulnerable western ringtail possum focus on the better known populations of WRP in the Busselton and Albany area, both documents recognise that information on the WRP is incomplete and that there are knowledge gaps.

The WRP Recovery Plan (2014) also highlights that limited short term studies and anecdotal accounts have contributed most of the knowledge on the WRP and that an understanding of the ecology and conservation status has been constrained by the difficulty in surveying the species. The recognition of these gaps in knowledge are reflected in the local and regional research priorities which include more precisely assessing population size, distribution, ecological requirements and the relative impacts of threatening processes.

### **Supporting Information**

Since the time of the initial Fauna survey for the proposal in 2011, information regarding populations of the WRP has expanded to include the Dawesville area.

Western ringtail possums are only found in the south-west of Western Australia. They can be found as far north as Dawesville near Mandurah (DPaW, 2015)

Smaller scattered occurrences are found around Augusta, Margaret River, Yallingup, Dawesville, Harvey and Collie (Shedley and Williams, 2014). Importantly, the species has shown that it is able to move through the urban area of Dawesville. This may in part be due to the fact that much of Dawesville has retained a high degree of canopy cover rich in peppermint.

Other recent records include that of a WRP killed during subdivision clearing works at a site just over 1km south of the subject site and 4 WRP that were relocated from the Gumnut development approximately 1.5km to the south east of the subject site.

### **Conclusion**

It may be accurate that in 2011 WRP were absent from the subject site however in the intervening period large areas of known and potential habitat have been lost. Clearing for urban development, illegal clearing (Panorama site) and the devastating 2015 Waroona fire which impacted a significant part of Yalgorup National Park may have pushed the population of WRP north into areas still supporting suitable habitat.

What is known is that WRP are persisting within the urban environment of Dawesville and the City of Mandurah is committed to efforts to retain the habitat of this species. The proposed development of Lot 9008 Ocean Road, Dawesville may impact on the local population of WRP and should be assessed further to avoid any additional impacts.

The Florida Local Structure Plan modification proposal is currently with the WAPC for assessment. They have 120 days to make a determination but based on the nature of the modification, the City of Mandurah expects a decision well within that timeframe.

## References


Background Paper to the EPBC Act Policy Statement 3.10: Significant impact guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, WA (Department of the Environment, Water, Heritage and the Arts (DEWHA), 2009)

Commonwealth Conservation Advice for *Pseudocheirus occidentalis* (Western Ringtail Possum) (Threatened Species Scientific Committee (TSSC), 2013)

Department of Parks and Wildlife (2014). [Western Ringtail Possum \(\*Pseudocheirus occidentalis\*\) Recovery Plan](#). Wildlife Management Program No. 58. Department of Parks and Wildlife, Perth, WA.

EPBC Act Policy Statement 3.10: Significant impact guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia (Department of the Environment, Water, Heritage and the Arts (DEWHA), 2009)

Florida North Level 1 Flora and Fauna Assessment (Ecoscape (Australia) Pty Ltd. 2012)

Shedley E and Williams K (2014)  [An assessment of habitat for western ringtail possum \(\*Pseudocheirus occidentalis\*\) on the southern Swan Coastal Plain](#) 1.9 MB. Unpublished report for the Department of Parks and Wildlife, Bunbury, Western Australia.