

FRIENDS OF FORRESTDALÉ SUGGESTED POINTS ON MAKING A DETALIED SUBMISSION

General – the proposed KRSL is part of Bush Forever (BF) Site 342 and of Jandakot Regional Park (JRP) and a Conservation Category wetland. KRSL would bisect both the BF site and the conservation category wetland, and fragment habitat as a result. The recently released ‘EPA Bulletin No. 20 Protection of naturally vegetated areas through planning and development’ includes the guideline to ‘protect large consolidated naturally vegetated areas.’ This guideline should be invoked and adhered to in rejecting the proposed construction of KRSL. The bulletin goes on to state that ‘large consolidated naturally vegetated areas have been shown to be the most resilient in protecting biodiversity in the long term.’ This Bush Forever site is 311.6 hectares large, includes vegetation in >75% excellent to pristine condition and has a low edge to area ratio. Many of the Bush Forever sites are small in size, less than 100ha. The Anstey Keane BF site in its current undivided state is a rare example of a large urban remnant. The proposed road would bisect pristine to excellent bushland, fragment it and would introduce damaging impacts and degradation to the whole BF site and threaten its conservation. These impacts include:

1. Weed invasion
2. Roadkill of fauna
3. Dieback
4. Off-road vehicles
5. Create a permanent barrier to fauna
6. Littering and rubbish dumping
7. Noise and light pollution

The cumulative effect of these impacts is not addressed.

The BF site contains one threatened ecological community and two priority ecological communities:

SCP10a: Shrublands on dry clay flats is located immediately adjacent to the KRSL. The proposed construction of the road would impact indirectly this **threatened ecological community (TEC)**.

SCP21c: Low-lying *Banksia attenuata* woodland or shrubland and SCP 22: *Banksia ilicifolia* woodland are located in the KRSL road reserve. The proposed construction would impact directly the **priority ecological communities (PEC)**. 90% of original Swan Coastal Plain (SCP) vegetation has been destroyed since white settlement.

Flora – Although surveys were conducted in accordance with the guidelines, the methodology for conducting the floral surveys was clearly inadequate. Based on local floral knowledge, a number of species were not identified, including priority flora (a list can be provided). Therefore there is a possibility that federally listed species under the EPBC Act were also overlooked.

Fauna – four federally listed fauna species are noted as occurring but other species may be present and a proper assessment should be undertaken. The (yet unlisted) “Megamouth Bee” *Leioproctus (Ottocolletes) muelleri*, discovered in December 2010, is new to science, and the only known breeding site for this species is just 200m from the proposed road. There is no mention in the PER that this species is likely to be listed under IUCN as an endangered species under federal and state legislation. The four listed taxa and our comments on them are:

1. Carnaby’s Black Cockatoo – *Calyptorhynchus latirostris* is confirmed as utilising the BF site as a feeding ground. Proposed offsets do not provide additional habitat (and food sources) for this species as no additional land for conservation is being purchased. Red-tailed Black Cockatoo *Calyptorhynchus banksii naso* have been observed in Forrestdale. The PER acknowledges their likely usage of the BF site but neglects to mention that their EPBC listing of vulnerable.

2. Graceful sun-mouth *Synemon gratiosa* – although none were sighted during one survey, the presence of this species could not be discounted as the floral species on which they feed (such as *Lomandra hermaphrodita*) is prevalent.
3. Rainbow bee-eater *Merops ornatus* – the EPBC fauna assessment claims that slopes are required for breeding purposes. This is incorrect. Bamford (Attachment 'A', p.34), SEWPAC Species Profile and Threats Database and Morecombe state that this species can nest on flat ground. Bryony Fremlin (pers. comm.) has recorded them nesting on flat ground at Anstey-Keane, as well as flocks of hundreds of this species, which included juveniles. This reserve is now known to be a breeding location for *M.ornatus*. Additionally, as this species breeds in late spring-summer, seasonal inundation (mentioned in the PER) does not decrease likelihood of breeding events in the BF site.
4. Short-tongued bee *Neopasiphae simplicior* - a species with a restricted distribution and unique lifecycle in the BF site is acknowledged within the current studies but the impact of the proposed road on it is not assessed and requires further research.

Brush Wallaby *Macropus irma*

It is acknowledged within the PER that Brush Wallabies (Priority 4 species) are likely to be present within the reserve, but the fauna tunnels identified in the PER do not meet this species needs (maximum height of 450mm). Therefore road mortality risk for this species has not been addressed in the PER. The road would create a barrier to the movement of the wallabies and would decrease their chance of continuing a healthy population in the reserve; from loss of individuals from road mortality and genetic restriction. Brush wallabies are identified in the WAPC BushForever document as a species in decline on the Swan Coastal Plain, elevating its need for protection in intact reserves such as this. Habitat fragmentation and vehicle noise would add to stresses on wallaby populations.

Additionally, the Western Grey Kangaroo would not have its needs met by the proposed small fauna tunnels either. Road strike and risk to public safety from collision with either species is not addressed.

Southern Brown Bandicoot *Isodon obesulus*

The PER document does not spend time discussing potential impacts on the Bandicoot, stating that total habitat loss within the clearing corridor is minor – this statement does not address impact from habitat fragmentation.

Reptile and amphibian diversity

The PER's reference *Bamford (2013a)* identified 2 reptiles and 3 frog species for the reserve, these numbers do not present an accurate representation of reptile numbers in the reserve the true representation are low. *Gaikhorst 2014* (in press) for the nearby Forrestdale Lake reserve identified 28 reptile and 7 amphibian species. This indicates low sampling rigor for the fauna survey used to support this PER. It can be assumed that further significant fauna may have been missed, such as *Ctenotus ora* or *Diplodactylus polyophthalmus*. Both species are recently described and likely to be elevated into state listing. Bryony Fremlin (pers. comm.) has noted 11 reptile species including the Oblong Turtle *Chelodina oblonga*, in Anstey-Keane.

The PER basically does not clearly state the importance of the reserve and its faunal diversity within its overview.

Dieback – (attachment 'J') dieback has been identified in four out of eight locations in the KRSL. An area near the Skeet Road end of the Keane road reserve has been identified as dieback-free. Construction of the proposed road would threaten the introduction of dieback to this area and would risk its spread throughout the road reserve. The Dieback Management Plan acknowledges the risk that road construction poses for the spread of dieback and lists procedures that should be followed in the construction of the proposed road. The complexity of these procedures and the onerous

reporting requirements attached to them would be impossible to adhere to and enforce in constructing the road with the amount of machinery and soil movement involved. DPAW and the City of Armadale (COA) should work together to contain dieback irrespective of the outcome of the proposed KRSL.

Traffic - This road proposal will only yield a small benefit to Forrestdale and Harrisdale. Alternative convenient vehicular access to Armadale for Harrisdale residents already exists and will be constructed in the future. **Completion of Skeet Road provides a viable alternative for access for Forrestdale residents to Harrisdale High School and for Harrisdale residents to Armadale, without the ecological damage.** Nicholson, Armadale and Ranford Roads will soon become dual carriageways. Alternative vehicular access to Armadale for Harrisdale already exists or is nearing completion. Ranford Road is nearing completion as a dual carriageway. Armadale and Nicholson Roads will eventually become dual carriageways.

Alternative access to Harrisdale High School via a cycleway on the western boundary of the Bush Forever site and a bridge over Armadale Road should be considered, and were not considered in the PER. The cycleway and bridge would provide access not only to the High School for Forrestdale residents but also to Forrestdale Lake and the Forrestdale trail for Harrisdale residents, as well as linking in the new Forrestdale Catholic College that will be built in 2015 on Armadale Road

Offsets – The COA's claim that land given over as offsets amounts to more than 50 times the 2 ha area to be cleared is misleading. No offsets offered could be considered reasonable. They are either badly degraded or are already protected within the Forrestdale Lake Nature Reserve and the Jandakot Regional Park:

1. Offset 1 east side of Lake Forrestdale is **already protected** under the Forrestdale Lake Management Plan (DPAW). COA land around the golf course is managed by DPAW as part of Forrestdale Lake NR;
2. Offset 2 (Gibbs Road Banjup boundary) next to the Denis DeYoung reserve is protected within the JRP;
3. Offset 3 – comprising Commercial Road SW - extremely degraded and unlikely to be used for anything anyway; and unmade Stirling Road - half of it is under wooden pylons. The remainder is good banksia woodland north end and excellent condition to the south-east. This is already within offset 1;
4. Offset 4 (Bartram Road) extremely degraded;
5. Offset 5 (Napier St, next to Primary School) this 0.4 ha strip, while containing a number of native flora species, is badly infested with veldt grass;
6. Offset 6 (Keane Road alignment southern end) is protected within the Jandakot RP. It includes shrubs on dry clay-pans (excellent condition), a 200m degraded area near Anstey Road, a firebreak, and a small area around some salt water paperbarks on the northern end of this offset.

The City of Armadale has a responsibility to conserve those areas already vested in it.

The road reserve should be removed from WAPC Structure Plan and incorporated into JRP. COA should cede its vesting in it (as it has with other road reserves in other BF sites in Forrestdale some of which it is now attempting to use as offsets for the proposed KRSL).

All submissions are to be made directly to the EPA. **The EPA prefers submissions to be made electronically on its consultation hub at <http://consultation.epa.wa.gov.au>**

Or **Posted to:** Chairman, Environmental Protection Authority, Locked Bag 10, EAST PERTH WA 6892, Attention: Ms Amy Sgherza