YANCHEP RAIL EXTENSION PART 2: EGLINTON TO YANCHEP: Public Environmental Review

Submission to EPA by Urban Bushland Council WA Inc. 8 July 2019

1.4.1 LAND TENURE pages 4-5

The rail proposal is adjacent to land zoned for 'future' urban development. The proposal assumes that the adjacent lands will be urbanised, but the fact that these adjacent areas are also areas of MNES and of state significance - with TECs and endangered species and their habitat to be cleared and lost - is not considered. Thus this rail proposal is only part of the story and is used to justify linear urban sprawl all the way to Yanchep through high conservation lands which should be protected and not cleared. Thus we submit that the rail proposal and its context should be considered as a whole by the EPA - especially for flora, fauna impacts and also for social impacts.

On page 5 it states that 28.82 ha of the development envelope lies within Bush Forever . The fact that the railway designation has 10.4ha of Bush Forever area does not justify the land use of rail above conservation purpose. The reality of the natural environment and its protection of MNES and State significance must be the highest priority in the EPA's assessment. Incursions of infrastructure into Bush Forever sites is contrary to the whole of government Bush Forever policy and plan. Thus as a matter of principle the AVOID approach is applicable to be applied here by the EPA.

ALTERNATIVE locations for the railway - if really justifiable at all - should be required by the EPA. Alternatives are discussed in the ERD but only costs are considered. An alternative rail or an express bus system located along Marmion Avenue would have much less flora, fauna and landform impacts. An express bus system may be much cheaper.

On page 4 it states that 19% of the rail development area is zoned P&R, but on page 5 the table states that 25.63% is zoned P&R in the development area. This is confusing.

1.4.3 page 7 -8 EPBC Act assessment of MNES: the proposal is a controlled action.

Clearing of Banksia woodlands TEC and of Carnaby's habitat is contrary to the Approved Conservation Advice for Banksia woodlands TEC, and is contrary to the (Commonwealth) Recovery Plan for Carnaby's. Thus they should not be permitted.

Approval and non-assessment under the EPBC Act of some adjacent bushland does not justify further clearing for the rail, OR for other urban developments nearby. This patch by patch approach is unacceptable.

Therefore it is recommended that the EPA considers the whole context of the location of the rail and the associated linear urban sprawl through these high conservation value lands which provide multiple environmental 'critical assets'.

Approval of surrounding urban developments and alternatives and avoidance are discussed in the next sections 2.2.2 on page 12, and 2.2.3 on page 13 and 2.2.4 pages 13-14.

2.2.2: Approval of surrounding urban developments (page 12)

It says that existing planning on adjacent lands has already - patch by patch- 'limited' location of the rail. This is used to justify location of the rail in conservation lands such as Bush Forever sites by using the terms 'surrounding urban developments HIGHLY CONSTRAIN THE YRE PROJECT AND THE ALIGNMENT OF THE RAILWAYS RESERVATION'.... effectively limiting it to its 'current alignment'.

This illustrates a very poor process of a lack of integrated planning - which should have started with protection of ALL Bush Forever sites, all sites on MNES and State listed TECs and habitats of rare species, as well as protection of landforms. The YRE and rail extension has clearly been an 'afterthought' in planning and we suggest is highly questionable.

2.2.3 PROJECT ALTERNATIVES page 13.

The justification above has been used by the PTA to propose Option 1 for the Development Envelope which cuts through Bush Forever site 289 and indeed severs the highly significant east-west linkage from the coastal dunes to Yanchep National Park. This is glaringly obvious on Figure 2-1 on page 15.

The existing Marmion Avenue location through BF 289 would be a better alternative with less impacts for a rail or express bus route as an alternative.

The alternatives of light rail, trackless trams, and express bus-ways have not been considered in this transport planning process. They would be much cheaper.

Also the concept of expensive heavy rail providing for future linear urban development is contrary to current policies and approaches for a more compact, sustainable city. Perth is already one of the most sprawling cities and this makes commuting distances and travel times excessive and with high greenhouse gas emissions.

THE SURROUNDING LAND CONTEXT - 2.5 page 24 attempts to justify the proposal on the grounds that surrounding lands are zoned urban to meet market demand for housing and associated uses with clearing/development of 366 ha within 1km of the rail and with 1350ha developments within 5 years. Table 2-3 on page 25 is confusing as it gives different figures and does not state how much of this land is native vegetation.

Much of this native vegetation is now TEC under EPBC Act - with endangered Banksia woodlands of the Swan Coastal Plain TEC, and now Tuart Woodlands of the Swan Coastal Plain is CE. There are also state listed TECs.

Thus there is a significant matter of CUMULATIVE IMPACTS from the context of urban development for the surrounding areas which the EPA should consider.

2.3 PROPOSAL DESCRIPTION page 16-

This section describes most of the proposed railway being ~6m below surrounding ground level in a highly undulating dune landscape. THIS IS A VERY SIGNIFICANT CHANGE IN LANDSCAPE FORM.

The cross section of existing elevations shown on page 18 in Figure 2-3 is revealing. While the tops of dunes will be cut through Ningana Bushland BF 289 and presumably used to fill the dips, this is a major change to the dune landscape which will have unclear or unknown hydrological impacts on adjacent vegetation.

The other sections are proposed to be under varying ground levels -some more than 10m below and others 2-3 m, with little above current level. So this means there will need to be very large volumes of dune material removed from the proposed track site.

This is an extraordinary impact on the landscape which will be significant. It illustrates the unsuitable nature of the landforms for construction of a heavy rail system.

Page 16 attempts to justify this deep cut proposal by saying (1) it will reduce noise to adjacent housing; AND (2) by expecting surrounding land to be altered from its current state. This is not an acceptable justification in itself. It does indicate that the proposed rail and urban development will have major landscape scale landform impact: this will result in catastrophic destruction of the existing Quindalup dune landscape form AND its associated native vegetation over 49.17 ha. (as stated on page 23 in 2.4.1).

The EPA's attention is drawn to this fundamental landscape impact.

2.4.2 CONSERVATION AREAS: Bush Forever (BF) 289

Clearing and loss of 28.82 ha of BF 289 alone is an environmentally unacceptable impact. There would also be degrading edge effects each side of the clearing footprint so the impact will be greater.

Offering an addition of 1.46 ha to P&R reservation whilst welcome is not justification and does not ensure or provide ongoing conservation management.

5. FLORA AND VEGETATION

There is 67.49 ha + another 18.02 ha classed as completely degraded native vegetation in the development envelope to be cleared (page 58). Whilst these vegetation types are not restricted to the development site, this does not justify their loss.

5.3.3: Threatened and Priority ecological communities page 65 -

The endangered *Melaleuca huegelii - M. systena* shrublands on limestone ridges (SCP 26a) are significantly threatened by this proposal as on page 65 it states that this community is not present within the additional survey area. SCP26a has a restricted distribution, so this loss, although reported to be 0.05ha, is a significant factor and unacceptable impact.

TABLE 5-6 shows the extent of another 3 State listed SCP PECs of which 8.76 ha, 13.68ha, and 2.13 ha respectively will be lost and these are all significant and unacceptable impacts. In addition there will be edge effects of loss of condition of adjacent vegetation.

The loss of EPBC listed Banksia woodlands of the SCP TEC is shown as 8.03ha. This is CONTRARY to the (Cth) Approved Conservation Advice for this TEC which is to PROTECT the ecological community to prevent its further loss of extent and condition. The edge effects of the proposal would also result in loss of condition of adjacent Banksia woodlands.

The proposal area and adjacent lands support a very complex array of vegetation communities as presented in section 5 and on Figures/maps. Thus the proposal and future 'linear' urban developments proposed are located in an inherently biodiverse landscape rich in landform, soil types, and vegetation floristic communities.

Again this data shows the suitability of the YRE rail extension and its associated assumed continuing urban developments in this landscape is environmentally unacceptable.

5.3.5 BUSH FOREVER (BF)

The information on pages 76-79 is significant.

Impacts on BF 289 are significant and are unacceptable. BF is for the purpose of conservation of nature in a

'CAR' reserve system and should not be used for other purposes such as this YRE infrastructure. The argument of high monetary cost to **AVOID** Bush Forever sites should not be used to justify locating YRE in BF 289. This flawed logic does not address the environmental cost.

5.3.7 ECOLOGICAL LINKAGES page 79

Notably the linkage barrier in BF 289 imposed by the YRE will be a very significant impact on east-west fauna, invertebrate and flora movement. This is on top of the impact on all the Bush Forever sites of all the previous vegetation clearing as described on page 79. Therefore this impact is environmentally unacceptable.

5.4 FLORA AND VEGETATION IMPACTS

The summary list of impacts for 'permanent loss' of conservation significant flora and vegetation shown on page 79 ARE SIGNIFICANT and thus environmentally unacceptable.

The indirect impacts listed on page 80 are also significant.

5.5.1 PERMANENT LOSS of native vegetation pages 80-81.

The % quoted of loss the vegetation complexes is inaccurate and thus misleading as it does not use the relevant data as shown in Appendix C the EPA Interim strategic advice under s 16(e) of EPA Act, dated July 2015. For Quindalup Dunes EPA report says 55% remains in IBRA region. The YRE document does not give the data for % remaining in Perth Peel Region (PPR) and MOST SIGNIFICANTLY does not give the % secure for conservation in PPR.

For Quindalup Dunes, only 15.4% is in PPR secure for conservation. This is under the preferred target of at least 30%.

For Cottesloe Complex North, 18.1% is secure for conservation in the PPR. This is also under the preferred 30%.

Therefore the summary conclusion on page 81 is not relevant and indeed is not correct. The regional mapping scale that should have been used is that of the PPR. There will be significant residual impacts to vegetation in the PPR which is already considered over cleared, with less than 30% remaining. Further, any loss of vegetation in Bush Forever sites and in TECs and habitat of endangered flora and fauna is a significant residual impact.

Bush Forever sites as shown on the MRS map are supposed to be secure for conservation, but this has not been adequately made into law so that these sites are secure and are not subjected to clearing proposals as in YRE.

CUMULATIVE IMPACTS Page 83.

Table 5-11 shows the very significant loss of both the above complexes in YRE Part 1 and YRE part 2 with the cumulative clearing, at both the local and regional scale. BUT AGAIN more than 30% of each complex does not remain in the PPR. This is not stated.

There is a permanent loss of the State TECs and PECs.

There will be a loss of 8.03ha Banksia Woodlands of SCP TEC and an increase in the fragmentation of this community.

There will also be a permanent loss of conservation significant flora

There will be indirect impacts to BF 289 from weeds, Phytophthora, altered hydrology and quality, and potential blowouts to Banksia woodlands and other remnants from changed dune landforms.

LANDFORMS pages 177- 191

The Holocene coastal dune systems are complex. The Quindalup parabolic dune landforms are significant. The PTA does not consider this to be the case.

The Quindalup dune complexity provides complex habitats which will be destroyed by the YRE. The variety of TECs and PECs illustrates this complexity.

It is clear that the Quindalup Dune landform will be destroyed with YRE and with levelling for housing development. The Quindalup parabolic dunes are fundamental to providing the habitat for the various plant communities. The dismissive description of ecological importance of the Quindalup Dunes on page 183 is not logical and is unacceptable.

Residential developments where sites are levelled changes the dune landform shape. The YRE proposes major changes to the Quindalup Dunes as stated earlier. While the existing vegetated dunes are no longer active, once they are cleared and the shapes changed, they may become active again - ie - be subject to unpredictable erosion especially while un-vegetated.

The development envelope for the YRE proposal will result in **DIRECT PERMANENT ALTERATION** to at least 17.54 ha of parabolic dunes, with approx. 9.82 ha and 2.77ha of Q1 and Q2 phases respectively. THIS IS A VERY SIGNIFICANT ENVIRONMENTAL LANDFORM IMPACT.

IN ADDITION, AS STATED ON PAGE 186, FUTURE URBAN DEVELOPMENT PROPOSED WITH RESULT IN A CUMULATIVE IMPACT OF LOSS OF 1929 HA OF PARABOLIC DUNES. At a local scale, 155.2 ha will be lost. **This is a highly significant loss at both scales**. The PTA cannot claim that their loss is insignificant.

Further, the indirect impacts of dune instability must be considered and avoided.

SUMMARY FOR LANDFORM IMPACTS

It is strongly recommended that the EPA seriously considers that this cumulative and local loss of the Quindalup Dune landform is highly significant and is an unacceptable environmental impact of YRE alone, and is also for further urban development.

The AVOID principle should apply.

Therefore alternatives for public transport such as those stated earlier - eg bus express along Marmion Avenue should be recommended and required.

13 MNES p302 -

CARNABY'S COCKATOO

The loss of 56.31 ha of Carnaby's Cockatoo habitat is contrary to the federal Recovery Plan for Carnaby's Cockatoo and therefore cannot be approved under the Controlled Action under the EPBC Act.

On page 314, the EPA IS ALERTED TO the statement that 'the proposed action is not expected to be significant based on the known presence of foraging and breeding habitat in adjacent conservation areas, ... '

THIS STATEMENT SUGGESTS THAT IT IS LOGICAL TO JUSTIFY NET LOSS OF HABITAT IN AN AREA BECAUSE 'THE CARNABY'S CAN GO ELSEWHERE' and that therefore this proposal will not have a significant impact for an endangered species. The assumption is that this justification can be given for continuing the destruction of habitat of an endangered species in this and in other proposals.

THIS FUNDAMENTALLY FLAWED REASONING MUST BE REJECTED BY THE EPA. THE NET LOSS OF HABITAT MUST NOT BE PERMITTED.

CARNABY'S COCKATOO POPULATIONS ARE IN SERIOUS DECLINE DUE TO CONTINUING LOSS OF HABITAT. This loss must be stopped.

Offsets are not a justification as clearing always results in a NET LOSS. The proposed mitigation including a land acquisition for addition to the conservation estate DOES NOT EFFECTIVELY MITIGATE THE IMPACT AS THE HABITAT SITE ALREADY EXISTS AND THEREFORE THERE REMAINS A NET LOSS OF HABITAT. This offset logic is nonsense.

Therefore the proposal is environmentally unacceptable on the grounds of loss of endangered species Carnaby's Cockatoo habitat.

MNES: BANKSIA WOODLANDS TEC

On Page 314, the similar rationale is given for loss of 8.03 ha of the Banksia woodland TEC. It says that without mitigation the 'removal' of the TEC is 'not expected to be significant based on the scale of clearing, and the presence of Banksia Woodlands TEC in adjacent conservation reserves.' THIS AGAIN IS FLAWED REASONING AND MUST BE REJECTED. UNDER THE APPROVED CONSERVATION ADVICE FOR THE BANKSIA WOODLANDS TEC, THE CONSERVATION ACTION IS TO *'protect the ecological community to prevent its further loss of extent and condition'*.

The EPA is therefore obliged to respect this Advice given under the EPBC Act.

The offset proposal for on-ground management of Ningana Bushland BF - while it is a task that should be carried out by government - should not rely on offset funding. This on-ground management of the 'CAR' reserve system in all Bush Forever sites should be carried out by the allocated conservation land manager for each BF site. DBCA managed sites should be funded directly by government budget allocation to Swan Region Conservation staff.

The EPA should be advising government accordingly. The UBC and community Friends groups are very concerned that management of the Bush Forever reserve system is not properly funded. This should be addressed and fully funded AHEAD of other infrastructure development proposals such as the YRE. Incursions into Bush Forever sites are environmentally unacceptable.

On page 317, the mitigation measures and offsets claim to be 'consistent with the Conservation Advice, namely:
'Preventing vegetation clearance and direct habitat damage'

THE CLEARING PROPOSED IS NOT PREVENTING VEGETATION CLEARANCE AND DIRECT HABITAT DAMAGE. There will be a net loss of habitat. Thus the mitigation measures are NOT CONSISTENT with the Conservation Advice.

While proposals for the YRE may have been modified to reduce clearing, alternative proposals for a transport corridor that does not traverse Ningana BF site, thus meeting the AVOIDANCE PRINCIPLE, should be required by the EPA.

As suggested, an express bus or trackless tram transport corridor along Marmion Avenue would be options. These may also be much cheaper.

CONCLUSION
The UBC does not support the YRE 2 proposal in its current forma and location.

Further the social and economic cost is questionable.

The context of cumulative impacts from further urban development in a narrow linear corridor so far from central Perth is not compact sustainable development. It includes extensive clearing and loss of TEC's and habitat of rare and endangered species, and of coastal landforms, all of which comprise unacceptable environmental impacts. Further, the social impacts of very long commuter distances is also unacceptable.

Representatives of the UBC would like the opportunity to discuss the YRE with the EPA and officers.

PLEASE REMEMBER THAT THE SOUTH WEST OF WA AND THE PERTH REGION ITSELF IS A GLOBAL BIODIVERSITY HOTSPOT FOR CONSERVATION PRIORITY BECAUSE IT IS UNDER THREAT.