

Submission: EPA Garden Street extension proposal: City of Gosnells

Level of Assessment by EPA was set at Referral Information with Additional Information.

The Urban Bushland Council (UBC) has contributed to invitations to comment on this proposal since February 2017.

Our view has not changed. In our submission to the City of Gosnells 19 February 2017 we wrote:

The Urban Bushland Council (UBC) does not support the Garden Street road extension proposal in any form and believes that it cannot be made environmentally acceptable as it will have multiple significant impacts on many MNES and on State listed endangered flora and fauna species and on Threatened Ecological Communities. It is also contrary to State Bush Forever policy.

PREAMBLE

Additional information published for public review as required for the EPA assessment is:

- 1.) Of the potential impact on flora and vegetation
- 2.) Of the potential impact on terrestrial fauna
- 3.) Of the potential impact on inland waters.

The Referral Supporting Document (RSD) also identifies:

- 4.) Social surroundings as a factor to be considered.

The UBC will discuss each of the three EPA identified factors, followed by other factors relevant to the proposal.

The EPA acknowledges that the bushland would be bisected, should this proposal be approved. For example, the EPA requested of the proponent's consultant: *'Provide further detail and description..... including the cumulative impacts resulting from **the bisection of the bushland remnant** by existing roads.'* (UBC emphasis) (page 5 'EPA comment No. 21, App Q – Response to EPA comments table.pdf')

The UBC is very, very concerned about this proposal for an 840 metre long four lane road being made through Holmes Street Bushland, Bush Forever site 125 - between Harpenden Street and Holmes Street in Southern River. It is environmentally unacceptable and contrary to Bush Forever policy to protect all Bush Forever sites.

EPA request for further information

Thanks go to the EPA for requesting the extensive information from the proponent. Information requested relates to the following and in addition, through 31 EPA Comment points:

- A. GENERAL (technical surveys/reports/assessment and all management plans),
- B. INLAND WATERS – dewatering or not,
- C. FLORA AND VEGETATION – appendix B does not meet the EPA's technical guidance,
- D. TERRESTRIAL FAUNA,
- E. SOCIAL SURROUNDINGS,
- F. OFFSETS and
- G. CUMULATIVE IMPACT.

BUSH FOREVER

The Urban Bushland Council WA Inc. is a voice for the bush and our commitment is to have Bush Forever sites protected and managed, and to see connections between sites improved. (Greenways and ecological linkages). The Bush Forever policy is *'the single most important piece of public policy that protects urban bushland.'* (www.bushlandperth.org.au)

As the EPA is aware, these Bush Forever sites are representative of regionally significant bushland areas that are planned to protect at least 10 % of each vegetation complex, where 10% remains. *'Bushland conservation not only fulfils a moral obligation to protect habitats from destruction and save species from extinction...'* (Bush Forever Volume A p vii)

The bisection of Bush Forever site 125 would do more harm than just clearing 2.04 ha of native vegetation and wetland. Fragmentation, edge effects and isolation, danger from car strike, light pollution, direct and indirect death of species, loss of habitat including loss of food, wetland loss and local extinctions are some of the impacts.

The WA State Government's plan to *'accelerate the approvals process'*, announced with no consultation with conservation groups, *'will require the EPA to consider what the government wants, as documented in a statement to the organisation from the environment minister.'* (WAtoday December 12, 2023 by Peter Milne). The EPA's role is to prevent environmental harm and the EPA must remain independent of Government interference.

'Significant residual impact'

The proposal, if implemented, would inflict environmental harm to this Bush Forever site. The proponent, through its consultant 360 Environmental, states that the clearing of *'no more than 2.04 ha of native vegetation'* – will have a **'significant residual impact'**. (360 Offset Strategy) (UBC emphasis). However, it is claimed that the impact of the proposal can be offset.

Several pages later we read that the clearing of 1.2 ha of vegetation in Bush Forever site 125 *'is not considered to be a significant impact on the environmental values of Bush Forever site 125'*. Presumably this claim is because of the provision of offsets? However the net loss from clearing, edge effects and fragmentation (as below) is an unacceptable impact.

Fragmentation

Fragmentation is one of the threatening processes and the 2017 Liberal Party contribution of \$7 million for the Garden Street extension, does not make reference to the damage that would be inflicted on the site, nor acknowledge that the proposed incursion is in a Bush Forever site. (facebook Peter Abetz - City of Gosnells Council)

Studies have been written on the threatening process of fragmentation and we quote from one study from Perth scientists entitled *'Complex effects of fragmentation on remnant woodland plant communities of a rapidly urbanizing biodiversity hotspot.'*

[Cristina E. Ramalho](#), [Etienne Laliberté](#), [Pieter Poot](#), [Richard J. Hobbs](#)

First published: 01 September 2014'

'Abstract: Our study suggests that in rapidly expanding cities, landscape fragmentation can have major and complex effects on remnant vegetation. Yet these impacts might take several decades to manifest themselves. Hence, understanding the long-term conservation capacity of newly formed remnants, which is key to setting conservation priorities, requires consideration of landscape fragmentation and land use

history. Moreover, the smaller and older remnants may already display changes due to fragmentation, providing clues for urban planning and ecosystem management that help to protect urban remnant plant diversity’.

The WA Museum website (museum.wa.gov.au ‘Vertebrate biodiversity in Perth’s urban bushlands’) notes the effect of fragmentation of vegetation remnants on the Swan Coastal Plain. ‘*Very few native mammal species survive this fragmentation of native bushlands. ‘...there is a strong positive correlation between size of the bushland and the number of reptile species;...’* Bisection of the site threatens persistence of species – plants, animals and fungi and communities.

Special Attributes, Wetlands and Linkage: Bush Forever Site 125

The Urban Bushland Council has high regard for scientists who have worked on the Bush Forever identification of sites and policy.

In the Bush Forever document, volume 2 Under ‘Other Special Attributes’ of Holmes Street Bushland Southern River/Huntingdale, we read: ‘*recommend to be protected with the purpose of conservation of nature and recreation compatible with the conservation of nature in study of bushland in the City of Gosnells (Trudgen and Keighery 1995) majority Site Category One Area, Middle Canning Catchment Study (Evangelisti and Associates et al, 1995) (page 259 Bush Forever Volume 2).*

Of site 125, the Bush Forever scientists wrote that the wetland management objective was ‘Conservation.’

The linkage (Greenway 91 – part of a regionally significant fragmented bushland/wetland linkage (Part A Map 7)) is also noted.

City of Gosnells ‘City owned and managed Natural Areas ranked according to Management Priority’

Bush Forever site 125 (Holmes Street Tincurrin Drive) is ranked third out of 38 sites within the City and is considered as ‘Management Category 1 – a high priority native conservation area. (City of Gosnells website)

In its Strategic Plan for the Future 2007-2010, the City of Gosnells objective 1.2 is:

‘*Reduce the negative impact of development on the environment.*’

The proposed extension of Garden Street is without doubt, increasing the negative impact of development on the environment.

The EPA’s assessment is on

- (1) the potential impact on flora and vegetation;
- (2) the potential impact on terrestrial fauna and
- (3) the potential impact on Inland waters.

All these factors will be impacted on including deaths of endangered species through car strike, and through clearing and fragmentation.

Comment will be made on each of the EPA’s three potential impacts, and comments on other matters follow.

(1) Potential Impact on flora and vegetation.

Biologic Environmental’s Figure 4.1 well depicts the richness of significant flora species in the larger area from Forrestdale Lake in the south to Welshpool Road East to the north.

FLORA

The two Conservation significant flora taxa recorded in the Study Area are *Jacksonia gracillima* (P3) and *Styphelia filifolia* (P3). Positions of these taxa are shown on Biologic Environmental's Figure 4.4. Only 2 of the 18 *Jacksonia gracillima* would survive if the proposal were to proceed and all the *Styphelia* (three) would be lost.

Ecological Restoration: It is alarming to read that the population of 15 *Caladenia huegelii* recorded in 1981, then in 1997, 2003, 2004, [and 2009?] has not been recorded since 2004 and is presumed to be extinct. The UBC understands that DBCA and the State Government are interested and investing in Ecological Restoration. Here could be an opportunity for restoration of this species in Bush Forever site 125 where it grew before becoming lost from the site.

The UBC has been advised that:

'Currently there are hundreds of flora and fauna species (and ecosystems) in our region that are teetering on the edge of the extinction canyon. Many of them are on the Priority Flora, Priority Fauna and Priority Ecological Community lists of DBCA and they have NO LEGAL PROTECTION under the WA Biodiversity Conservation Act'. (21/12/2023 pers. com. Cate Tauss January 2024.)

Because they are not yet gazetted as Threatened Flora, Threatened Fauna and Threatened Ecological Communities, they are not able to be considered by the EPA.

Biologic Environmental note that Ecological Community/Wetland within the study area are:

Banksia WL SCP

Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region

Claypans with shrubs over herbs

Claypans with mid dense shrublands of Melaleuca lateritia over herbs (Component of Clay Pans SCP (EPBC T-CR)

SCP23b

Banksia attenuata – Banksia menziesii woodlands of the Swan Coastal Plain (floristic community type 23b as originally described in Gibson et al. (1994)) (Component of Banksia WL SCP (WA P3, EPBC T-EN)

Biologic Environmental, in responding to the EPA advice, advise that *'the Study Area falls within the Southern River vegetation complex as part of the highly cleared SCP bioregion....as well as partially overlapping a Sumpland classified as a CCW (DBCA 2019; PGV, 2014'.)* Notably only 1.5% of the Southern River Complex is secure for conservation in the Perth Peel Region. Therefore no loss of this complex from the Bush Forever site 125 is acceptable.

Already we have taken far more than our fair share of bushland, wetland, heathland and forest. The default position now should be to conserve **all** remaining Banksia Woodlands and wetlands.

VEGETATION

Banksia Woodlands of the SCP Threatened Ecological Community is listed under the *Environmental Protection and Biodiversity Conservation (EPBC) Act* as 'endangered', and the 'Approved Conservation Advices' (p 33) which state that under the *'Priority protection and restoration actions', the three key approaches to achieve the conservation objectives are:*

- *PROTECT the ecological community to prevent further loss of extent and condition;*
- *RESTORE the ecological community within its original range by active abatement of threats, re-vegetation and other conservation initiatives;*
- *COMMUNICATE WITH AND SUPPORT researchers, land use planners, landholders, land managers, community members, including the Indigenous community, and others to increase understanding*

of the value and function of the ecological community and encourage their effort in its protection and recovery.

*... Actions inconsistent with these recommendations that are likely to significantly affect the ecological community **should not be undertaken.***' (UBC emphasis)

For this reason, clearing of the Banksia Woodlands should not be permitted for the Garden Street extension.

Claypans with mid Dense Shrublands of *Melaleuca lateritia* over herbs: ('in excellent condition').

Biologic Environmental states that this vegetation type: *'do not represent any vegetation of conservation significance, particularly that of Claypans with mid dense shrublands of Melaleuca lateritia over herbs.'*

Highly respected botanist Cate Tauss, having looked closely at the wetlands/heath/scrub area at the site, on at least two occasions, considers that the species she has listed are 'strong indicators of the TEC 'Clay Pans of the SCP''. The UBC supports the submission made to the EPA by Cate Tauss. Consistent with the EPA's role to protect the environment, there should not be any clearing of this TEC. The avoid principle must apply.

Biologic Environmental's map of 'Vegetation condition in the Study Area' Figure 4.9, shows that the condition of vegetation over the great majority of the Study Area ranges from Good to Excellent. This should not be cleared.

2.) FAUNA

Carnaby's Cockatoo:

'The Banksia Woodland represents very high quality foraging habitat for black cockatoos.' (p iii Biologic Garden Street Extension Ecological Survey, April 2022) and with Melaleuca Thicket *'are likely to provide core habitat for species of conservation significance.'* (ibid)

Actions are likely to be significant if Carnaby's Cockatoos are killed through vehicle strike. A single death is significant. Also likely is that there would be many deaths and injuries through Garden Street being extended through Carnaby's habitat. An objective for mitigation and/or offsetting for Carnaby's Cockatoos is *'To improve the security of tenure and management and the condition of habitat throughout the non-breeding range.'* (p25)

'Key threats are habitat loss, habitat fragmentation and degradation, loss of breeding hollows and nest availability and mortality' (p 10 EPA Advice: Carnaby's cockatoo in EIA in the Perth and Peel Region.

The bisection of the site, the loss of 1.59 hectares of quality Carnaby's foraging habitat, and the threats (certainty) of death and injury from car strike is unacceptable and must not be permitted.

Red-tailed Black Cockatoo:

Red-tails have been recorded using the site. The behaviour and occurrence of these birds has been changing since around 2005, with flocks leaving the forest to forage on the Swan Coastal Plain on Cape Lilac pips. They have established patterns of flight from roosting sites, heading from their roost sites to feed and to teach their offspring how to survive. Some have started breeding on the Swan Coastal Plain, rather than returning to the Jarrah forest to breed.

'... like Carnaby's, Red-tails incursion into urban areas has increased the incidents of mortality from vehicle strikes.' (p 15 EPA advice: 'Carnaby's Cockatoo in Environmental Impact assessment in the Perth and Peel Region'.)

Both Carnaby's and Red-tails would suffer death and injury should Garden Street be extended through black cockatoo habitat. This is unacceptable and must not be permitted.

Quenda:

Quenda are present in the Banksia Woodland. Banksia woodland and Melaleuca thicket are 'core habitat' for Quenda due to the dense understorey, food and water availability. Loss of their habitat and risk of vehicle strike must not be permitted.

Short-range endemic species and insects:

The world is experiencing a loss of abundance and diversity of insects, with the cascading effects of loss of pollination and loss for insectivorous birds. Lighting associated with roads and sporting fields (often adjacent to bushland), is a further threat to insects. Light pollution causes disorientation of insects and predation by hawking birds and bats.

The Friends of Wireless Hill in Applecross is actively working to encourage home dwellers around Wireless Hill to keep their veranda lights off at nights and to lessen the impact of street lights around Wireless Hill. This initiative followed the invertebrate surveys done recently at Wireless Hill by David Knowles of 'Spineless Wonders'.

Lighting from streets and cars threatens insect survival. The Garden Street extension through this Bush Forever site 125 would cause similar unacceptable impacts on insects. This is another reason that the proposal is environmentally unacceptable.

Yellow-rumped Thornbill:

'Voice: Song: vivacious merry tinkling with cyclic pattern' (p306 Graham Pizzey: 'Field Guide to the Birds of Australia'). 'Voice' is mentioned to help us understand what we are losing as birds like Yellow-rumped thornbills decline around Perth. Yellow-rumped Thornbills are on the list of birds still extant in this site. However, in Kings Park Yellow-rumped Thornbills are rare and localised and in Underwood Bushland, Shenton Park, they are extinct. (pers comm Dr Ian Abbott, 21 January 2024)

One of the threats to the retention of small birds in Kings Park is 'roads and development'. (p 758 Harry F. Richer, *Impact of Wildfire on the Avifauna of Kings Park, Perth, Western Australia. CSIRO Australia 1997*). Thus the Garden Street extension would have an unacceptable impact on small birds in this Bush Forever site.

Because of all these unacceptable impacts on fauna, the Garden Street extension proposal through Bush Forever 125 is environmentally unacceptable.

3.) INLAND WATERS

The objective of Conservation Category Wetlands (CCWs) is '*To preserve wetland (natural) attributes and functions*'. (EPA)

'360 environmental' identifies three potential impacts on Inland Waters. (p ix S 38 Referral Supporting Document)

The advice given by 360 environmental in its 's. 38 Referral Supporting Document' (p 69) is alarming. We read the following:

- '*The proposed Garden Street extension will pass through a section of Sumpland that is classified as a CCW including an area that is inundated up to 300mm in winter/spring*'.
- '*The Development Envelope intersects two distinct sections of the wetland*' (Fig 4)
- '*Loss of up to 0.45 ha native vegetation associated with a CCW*'.

In reading the EPA's 'Environmental Factor Guideline for Inland Waters June 2018,' many of the headings and points are relevant to this proposal. The Sumpland classified as a CCW is a wetland type which 'may be poorly represented in the conservation reserves system (p 3) and part of a significant ecosystem'.

The UBC submits that there is likely to be a significant residual impact from this Garden Street extension proposal, if implemented, and that the EPA environmental objective for inland waters will not be met. The EPA document talks about buffers. In this proposal building a 6 lane road through a CCW Wetland is not protecting the wetland.' The EPA considers a buffer adjoining a wetland or waterway helps to maintain the ecological and hydrological processes and functions associated with the wetland or waterway, and aims to protect it from potential adverse impacts.' (p5 and 6)

Cumulative impact - wetlands

'Perth was just one big wetland. What you see now is just a glimpse of what we used to have. All these low areas have been filled in to make way for housing and industry otherwise they were all connected. One big wetland right the way to the scarp.'

Karen Jacobs, Whadjuk Nyungar Elder. (Educational sign at Manning Lake by City of Cockburn)

Conservation Category Wetlands are irreplaceable public assets and much of the proposed road traverses areas so mapped. This is environmentally unacceptable and therefore the road proposal must not be permitted through these areas to be consistent with:

'Wetlands Conservation Policy for Western Australia' was released 23 August 1997 with five principle objectives for the conservation of wetlands with objective 1 being *'To prevent further loss or degradation of valuable wetlands and wetland types, and promote wetland conservation, creation and restoration.'*

'Approximately 25% of the Swan Coastal Plain is considered wetland, and of these, 20% retain high ecological values (DBCA 2019). There is a very high incidence of degradation that has occurred on the Swan Coastal Plain, with many wetlands in the region succumbing to the effects of urban development.'

Approximately 1.7 ha (35%) of the study area overlaps a Geomorphic Wetland identified as a Sumpland (Figure 3), indicating it is subject to seasonal inundation during the winter months (DBCA 2021).' (Phoenix Environmental Sciences: 'Short-range endemic and significant invertebrate desktop assessment for the Garden Street Extension Project, June 2023.')

Figure 4.10 Biologic Environmental depicts the 'Groundwater dependant vegetation in the Study Area' and the wetland over the site. To protect our remaining wetlands there must be no further destruction and fragmentation of wetlands, their natural vegetation and habitat.

A recent example of a CCW Wetland being disrespected is at Prinsep Road Jandakot where Prinsep Road was constructed through what is now considered a CCW. The wetland on the southern side of Prinsep Road is now under threat by developer aspirations and by the State Government, for the Perth Surf Park.

Climate change

Professor Hugh Possingham stated that after land clearing, climate change could be the biggest threat to biodiversity. (Friday 19 January 2024 ABC News; Christopher Gilette)

Offset Strategy (360 environmental November 2023)

The offset policy has been described as a fantasy (19 December 2023 *'The last stand: Perth to save 1800ha of its pines. Will it be enough?'* Emma Young WA Today.) The cumulative impacts of habitat loss on endangered species have led to a net loss of habitat.

Whilst the UBC does NOT support the concept of offsets – it can appreciate that the City of Gosnells has acquired or put aside areas that may qualify as offsets for the Garden Street extension. However,

obviously the bisection of Bush Forever site 125 is unacceptable and cannot be mitigated through offsetting. In addition, offsets will be of no use to the displaced native fauna.

Advice from the Federal Minister for Environment and Water, the Hon Tanya Plibersek:

"We want to better protect nature, while also supporting essential sustainable development like housing and renewable energy. Developers should do everything they can to avoid habitat destruction and reduce impacts on nature. Properly managed offsets are a last resort but will help to make sure nature is better off overall."

Nature will not be better off if this proposed road is approved.

In conclusion, it is strongly recommended that this proposal be assessed as environmentally unacceptable, and that it not be permitted in any form within or impacting on Bush Forever site 125.

Representatives of the UBC are available to meet with you to further discuss these matters.

Yours sincerely

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References:

ⁱ *Environmental Protection & Biodiversity Conservation (EPBC) Act 1999*
<https://www.legislation.gov.au/Details/C2021C00182>

Cristina E. Ramalho, Etienne Laliberté, Pieter Poot, Richard J. Hobbs: *Complex effects of fragmentation on remnant woodland plant communities of a rapidly urbanizing biodiversity hotspot.*

EPA advice: *Carnaby's Cockatoo in Environmental Impact assessment in the Perth and Peel Region.*

Graham Pizzey: *Field Guide to the Birds of Australia*

'Wetlands Conservation Policy for Western Australia'; Department of Biodiversity, Conservation and Attractions