

Sub-regional Species Strategy for the Southern Brown Bandicoot

Supplement: Habitat connectivity

Melbourne Strategic Assessment



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ISBN 978-1-74326-965-7 (pdf)

Accessibility

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Introduction

The Department of Environment and Primary Industries (DEPI) prepared the Sub-regional Species Strategy for the Southern Brown Bandicoot (DEPI, 2014) in response to obligations arising from the Melbourne Strategic Assessment (MSA) conducted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The Sub-regional Species Strategy for the Southern Brown Bandicoot (SBB strategy) was completed in January 2014, following public consultation, and was submitted to the Commonwealth Minister for the Environment for approval.

In considering the approval, the Commonwealth Department of Environment requested that DEPI clarify and provide additional guidance on commitments to provide habitat connectivity for the Southern Brown Bandicoot in Melbourne's south-east region to achieve the conservation outcomes for this species under the MSA.

The purpose of this supplement is to clarify these commitments.

This supplement forms part of the SBB strategy.

Connectivity within the south-eastern growth corridor

The Victorian government will create and enhance habitat in the Botanic Ridge and Devon Meadows precincts to provide habitat connectivity that enables the Southern Brown Bandicoot to disperse between the Royal Botanic Gardens Cranbourne and rural areas to the south outside the Urban Growth Boundary (UGB).

The provision of habitat connectivity will not result in any loss of developable land in the Botanic Ridge Precinct Structure Plan (Metropolitan Planning Authority, January 2013), approved in February 2013 by planning amendment C133 to the Casey Planning Scheme, or the Devon Meadows precinct.

The provision of habitat connectivity will comprise revegetation and landscaping to create and enhance habitat in open space areas. A landscape plan will be prepared for each precinct setting out the details of revegetation and landscaping for the Southern Brown Bandicoot. The plan will provide for the creation and enhancement of habitat while ensuring the primary functions of the open space areas (such as drainage or recreation) are maintained and fire risk is managed to ensure no increased risk to adjacent residential areas. The plan will be prepared in consultation with DEPI, the relevant land managers and the Country Fire Authority.

The revegetation and landscaping to create and enhance habitat will be funded under the Southern Brown Bandicoot fund. Details of the approach will be incorporated into the Southern Brown Bandicoot implementation plan (to be prepared by 2016). Funding to create, enhance and manage habitat will only be provided for activities that are additional to existing land management requirements for passive open space and drainage reserves.

DEPI will consult with relevant land managers and seek advice from the Southern Brown Bandicoot advisory committee about including the areas provided for habitat connectivity in the integrated predator control program prepared for the Southern Brown Bandicoot management area, as discussed in the SBB strategy.

DEPI will monitor the success of the habitat connectivity provided within the Botanic Ridge and Devon Meadows precincts. Details of monitoring and reporting, including monitoring timeframes and key performance indicators, will be set out in the Monitoring and Reporting Framework for the MSA program.

Botanic Ridge

The provision of areas of habitat connectivity will occur on land unsuitable for urban development within the following three areas of the Botanic Ridge precinct (see Figures 1 and 2).

- **Powerline easement (Botanic Ridge State 1)**

The Victorian government, through DEPI and the Metropolitan Planning Authority, and in consultation with the City of Casey and SP AusNet, will allocate funding from the Southern Brown Bandicoot fund to create and enhance habitat within the Botanic Ridge Stage 1 powerline easement for the Southern Brown Bandicoot.

The creation and enhancement of habitat for the Southern Brown Bandicoot and management arrangements for the land will be determined in consultation with SP AusNet and the City of Casey. This will be undertaken consistent with the primary use of the easement to provide passage for existing and future high-voltage power infrastructure and to

contribute to the recreational needs of the Botanic Ridge community. The Country Fire Authority will be consulted to ensure that there is no increased fire risk to adjacent residential areas.

The powerline easement runs north-south through stage 1 of the Botanic Ridge urban development (west of the gazetted Botanic Ridge precinct structure plan area). The easement ranges in width from 125 metres to 150 metres, presenting a habitat connectivity opportunity between the Royal Botanic Gardens Cranbourne, south to an area outside the urban growth boundary which ultimately connects to the confirmed Southern Brown Bandicoot population at Quail Island.

The powerline easement land is proposed to transfer to the City of Casey, with an easement to remain in the favour of SP AusNet. The management of this area is currently governed by an agreement between the City of Casey and landowners under Section 173 of the *Planning and Environment Act 1987*. The land is already being developed for passive recreation purposes in accordance with this agreement.

The powerline easement must provide for existing 66KV and 220KV lines plus a future 500KV line. Revegetation specifications must meet SP AusNet guidelines for the revegetation and management of the easement land, including periodic access requirements for line maintenance. This is likely to consist of low growing shrubs and grassy open areas.

- **Drainage reserves**

The Victorian government, through DEPI, the Metropolitan Planning Authority and Melbourne Water, will allocate funding from the Southern Brown Bandicoot fund to create and enhance habitat within drainage reserves in the Botanic Ridge precinct for the Southern Brown Bandicoot.

The creation and enhancement of habitat for the Southern Brown Bandicoot and management arrangements for the land will be determined in consultation with Melbourne Water. This will be undertaken consistent with the primary use of the land to provide drainage functions for Botanic Ridge precinct and surrounding areas. The Country Fire Authority will be consulted to ensure that there is no increased fire risk to adjacent residential areas.

Two drainage easements/reserves run from the eastern boundary of the Royal Botanic Gardens Cranbourne in an east-south east direction into adjoining land (Devon Meadows). These areas are also designated as 'passive open space – nature based' in the Botanic Ridge precinct structure plan (areas P9 and P10 on plan 5).

The land manager for these areas will be Melbourne Water.

- **Passive open space reserves**

The Victorian government, through DEPI and the Metropolitan Planning Authority, and in consultation with the City of Casey, will allocate funding from the Southern Brown Bandicoot fund to create and enhance habitat within passive open space reserves in the Botanic Ridge precinct for the Southern Brown Bandicoot.

The creation and enhancement of habitat for the Southern Brown Bandicoot and management arrangements for the land will be determined in consultation with the City of Casey. This will be undertaken consistent with the primary use of the reserves to provide opportunities for passive recreation and open space for the Botanic Ridge community. The Country Fire Authority will be consulted to ensure no increased fire risk to adjacent residential areas.

Passive public open space areas designated as 'passive–destination' and 'passive–contemplative' in the Botanic Ridge precinct structure plan (areas P4 and P5 on plan 5) are located along a ridge line running from the southern boundary of the Royal Botanic Gardens Cranbourne.

The land manager for these areas will be the City of Casey.

Devon Meadows

The Victorian government, through DEPI, the Metropolitan Planning Authority, Melbourne Water and the City of Casey, will create and enhance habitat within drainage reserves, passive open space reserves and other areas unsuitable for urban development in the Devon Meadows precinct for the Southern Brown Bandicoot and link these areas with the areas of habitat connectivity provided in the Botanic Ridge precinct.

The drainage reserves, passive open space reserves and other areas subject to the creation and enhancement of habitat, and the management arrangements for this land, will be determined in consultation with the Metropolitan Planning Authority, Melbourne Water and the City of Casey during the precinct structure planning stage. The Country Fire Authority will be consulted to ensure that there is no increased fire risk to adjacent residential areas.

The provision of habitat connectivity for the Southern Brown Bandicoot will occur on land unsuitable for urban development and will not result in any loss of developable land in the Devon Meadows precinct.

Connectivity outside the south-eastern growth corridor

Existing commitments

The SBB strategy contains a number of commitments to provide habitat connectivity outside the south-eastern growth corridor. The key commitments are to:

- Prioritise incentive programs on private land to enhance habitat connectivity between important populations and habitat for Southern Brown Bandicoot, subject to any relevant results of the research program to be established as part of the implementation of the SBB strategy.
- Implement integrated predator control within the Southern Brown Bandicoot management area to facilitate connectivity between Koo Wee Rup Swamp and the coast of Westernport to the UGB.
- Implement various measures to enhance habitat connectivity within Koo Wee Rup Swamp, where these actions are unfunded and beyond existing obligations under the management plan for Koo Wee Rup Swamp and in accordance with the priorities of the Southern Brown Bandicoot implementation plan.

Additional commitments

The Victorian government, through DEPI, will allocate funding to incentive programs on private land from the Southern Brown Bandicoot fund to enhance habitat connectivity between the boundary of the UGB south to important populations and habitat for the Southern Brown Bandicoot on Quail Island.

DEPI will design the incentive programs, including determination of priority target areas for incentive funding and the total and annual amounts of funding to be allocated to the programs, in consideration of advice from the Southern Brown Bandicoot advisory committee and taking into account the costs and benefits relative to existing alternative conservation measures set out in the Southern Brown Bandicoot implementation plan.

The incentive programs will be voluntary. They will be designed to pay landowners who agree to deliver on-ground works to enhance habitat for the Southern Brown Bandicoot on their land.

Details of the incentive programs will be set out in the Southern Brown Bandicoot implementation plan.

The Victorian government, through DEPI, will investigate other opportunities to enhance habitat connectivity between the Royal Botanic Gardens Cranbourne and other important populations and habitat for Southern Brown Bandicoot outside the south-eastern growth corridor, as a priority.

DEPI will focus investigations within the Southern Brown Bandicoot management area to ensure the other conservation measures in the SBB strategy, such as integrated predator control, complement the provision of habitat connectivity outside the south-eastern growth corridor. However, DEPI may also consider opportunities to connect the Royal Botanic Gardens Cranbourne with important populations and habitat outside the management area. In considering these opportunities, DEPI will seek advice from the Southern Brown Bandicoot advisory committee.

The Southern Brown Bandicoot advisory committee will prepare a cost-benefit analysis to assess the costs and benefits of opportunities to connect different important populations and habitat and analyse each of these options against existing alternative conservation measures set out in the Southern Brown Bandicoot implementation plan.

In deciding whether to pursue any opportunities, DEPI will consider the cost-benefit analysis and any relevant results of the research program and the Monitoring and Reporting Framework, including any information on the effectiveness of the provision of habitat connectivity within the Botanic Ridge and Devon Meadows precincts.

The provision of habitat connectivity outside the south-eastern growth corridor will be delivered through incentive programs on private land in targeted areas. The incentive programs will be voluntary. They will be designed to pay landowners who agree to deliver on-ground works to enhance habitat for the Southern Brown Bandicoot on their land.

Details of the incentive programs will be set out in the Southern Brown Bandicoot implementation plan.

The Southern Brown Bandicoot management area will be amended to include any approved habitat connectivity proposal that occurs outside the current management area as described in the SBB strategy.

Summary of habitat connectivity commitments

Table 1 summarises the specific commitments to provide habitat connectivity for the Southern Brown Bandicoot in the SBB strategy and the additional commitments set out in this report.

Table 1: Summary of habitat connectivity commitments in the SBB strategy and this report

	Existing commitments - SBB strategy	Additional commitments
Within south-eastern growth corridor	<p>Undertake integrated predator control in the vicinity of the Royal Botanic Gardens Cranbourne to facilitate connectivity to populations outside the south-eastern growth corridor</p> <p>Implement domestic cat controls in the vicinity of the Royal Botanic Gardens Cranbourne to facilitate connectivity to populations outside the south-eastern growth corridor</p> <p>Investigate potential use of planning controls, such as environmental significance overlay, as part of the implementation planning process</p>	<p>Create and enhance habitat for the Southern Brown Bandicoot in the following three areas within the Botanic Ridge precinct:</p> <ul style="list-style-type: none"> • Powerline easement (Botanic Ridge State 1) • Drainage reserves • Passive open space reserves <p>Create and enhance habitat within drainage reserves, passive open space reserves and other areas unsuitable for urban development in the Devon Meadows precinct for the Southern Brown Bandicoot and link these areas with the areas of habitat connectivity provided in the Botanic Ridge precinct</p>
Outside south-eastern growth corridor	<p>Prioritise private land incentive programs to enhance habitat connectivity, subject to the results of the research program</p> <p>Implement integrated predator control to facilitate connectivity between Koo Wee Rup Swamp and Westernport to the Urban Growth Boundary</p> <p>Implement integrated predator control, undertake private land incentive programs, protect and create habitat links, and establish appropriate planning controls to facilitate habitat connectivity within Koo Wee Rup Swamp, subject to the implementation planning process</p>	<p>Allocate funding from the Southern Brown Bandicoot fund to incentive programs on private land to enhance habitat connectivity between the boundary of the UGB south to important populations and habitat for the Southern Brown Bandicoot on Quail Island, as a priority</p> <p>Investigate other opportunities to enhance habitat connectivity between the Royal Botanic Gardens Cranbourne and other important populations and habitat for Southern Brown Bandicoot outside the south-eastern growth corridor, as a priority</p>

References

Department of Environment and Primary Industries (January 2014) Sub-regional Species Strategy for the Southern Brown Bandicoot. Victorian Government, Melbourne.

Metropolitan Planning Authority (January 2013) Botanic Ridge Precinct Structure Plan, Victorian Government, Melbourne.

Figure 1: Indicative location of habitat connectivity areas in broader landscape

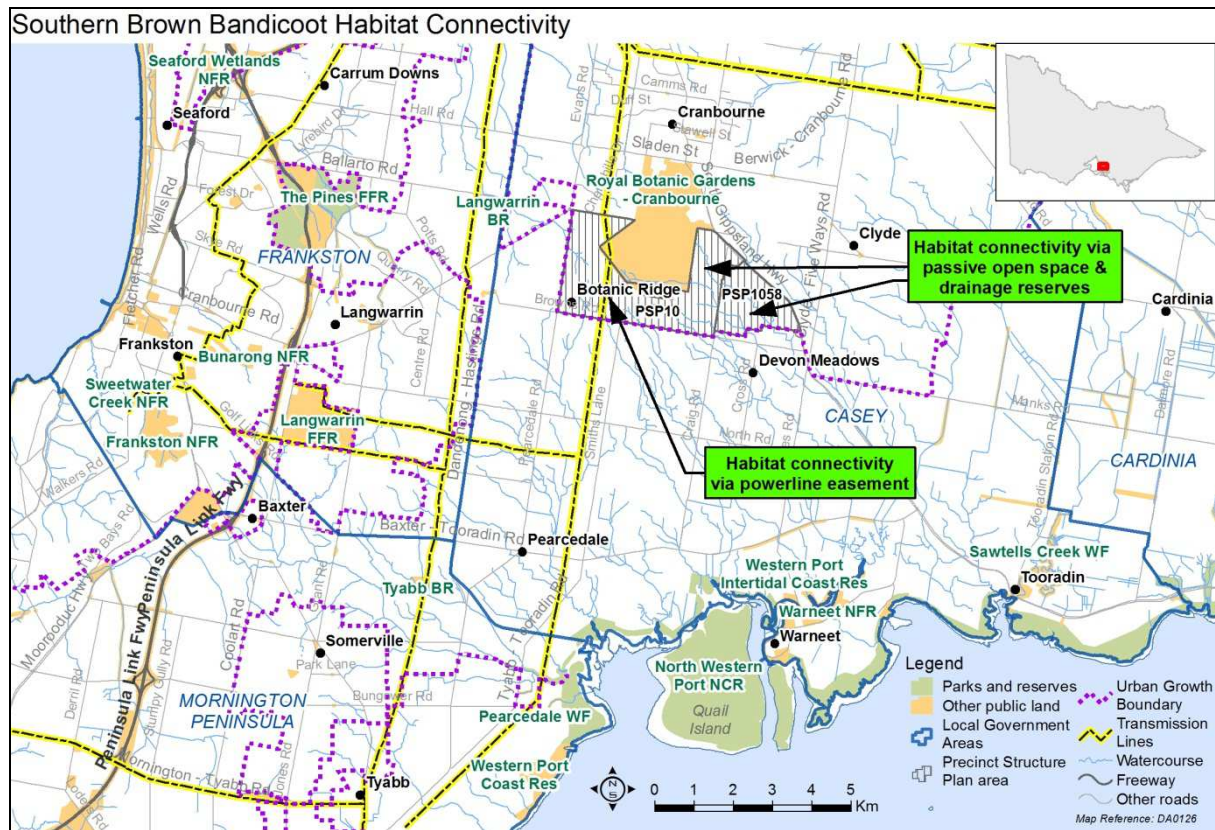
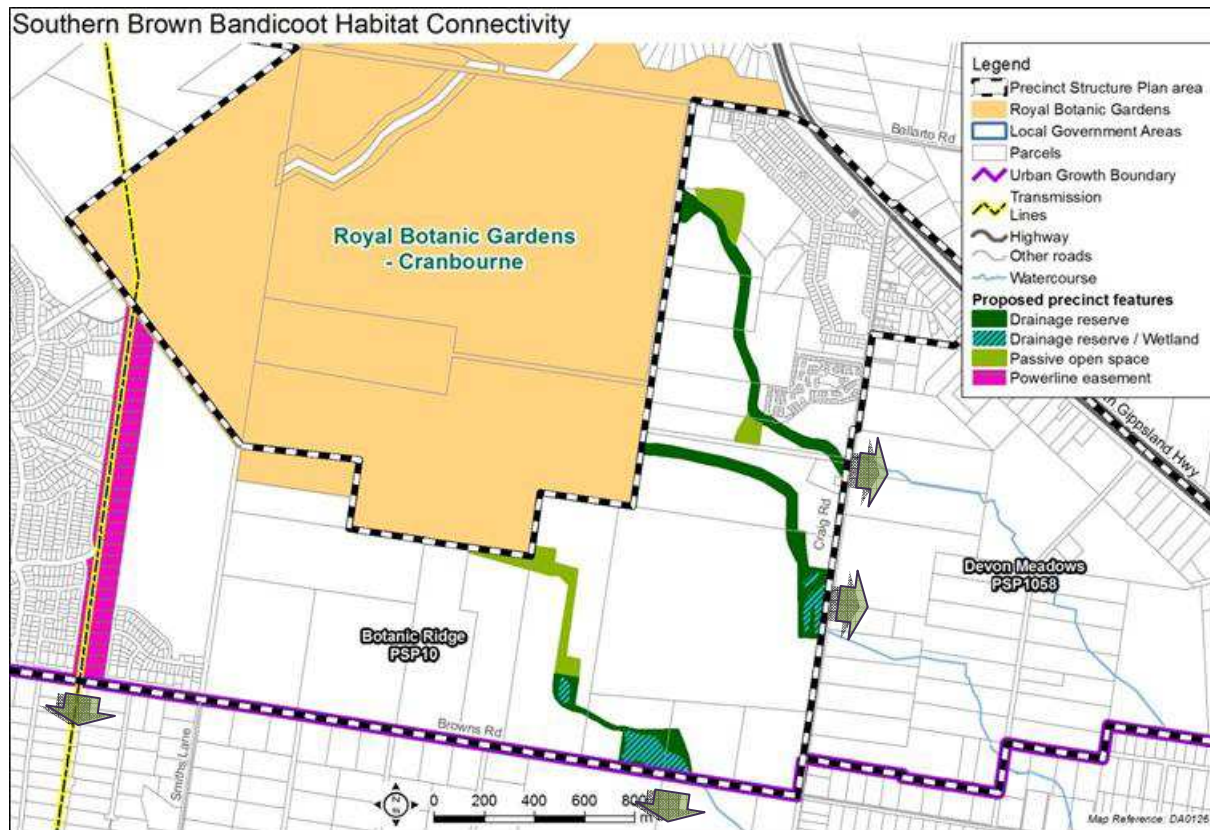


Figure 2: Location of habitat connectivity areas in Botanic Ridge precinct



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