

Proposal for the creation of a regional park on the northern limits of Perth City

Friends of Moore River Estuary (FOMRE)

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1 Overview

It is proposed that a new park be formed encompassing the area between the northern limits of Perth's urban development at Two Rocks and the south bank of the Moore River estuary, bounded to the west by the Indian Ocean and to the east by Indian Ocean Drive. The proposed park forms part of the traditional lands of the Yued people. This proposal summarises some of the potential outcomes that would arise following consolidation of the existing reserves, Unallocated Crown Land and the small parcel of currently undeveloped private land into a single park. The land in question is unique in its proximity to the limits of metropolitan Perth to the south and the Moore River estuary to the north. The land contains a number of threatened ecological subcommunities (TECs) of the Swan Coastal Plain and includes portions of the Gngangara, Gingin and Yanchep Groundwater Management areas. As urban areas have expanded on the Swan Coastal Plain, a great deal of biodiversity has been lost (Hill et al. 1996). The unification of this area into a single park would have multiple benefits for protecting the remaining biodiversity as well as enhancing opportunities for nature-based cultural and recreational tourism. It could also create employment opportunities through the Indigenous Ranger Program. The proposed park will complement Yanchep National Park, Neerabup Regional Park, Neerabup Nature Reserve and the regionally significant remnant bushland identified under the Bush Forever program (Government of Western Australia 2000).

2 Area and Tenure of Proposed Park

The area, outlined in blue in the maps in Appendices 1 and 2, predominantly consists of shire reserves, reserves currently under management of the Department of Biodiversity, Conservation and Attractions (DBCA), Unallocated Crown Land or state forest in addition to 2099 ha in the north-west corner owned by "Moore River Company Pty Ltd - Marcus Plunkett & Graeme Sampson" and two other small privately-owned blocks bordering the south bank of the Moore River. The northern boundary of the park would be defined by the extension of Barragoon Road to the upper eastern boundary of Lot 2149 with the remainder of the northern limit being defined by the south bank of the Moore River. The southern boundary of the park would be defined by the boundary between the Shire of Gingin and the City of Wanneroo. The coast forms the western boundary and Indian Ocean Drive defines the eastern border of the proposed park.

A list of the lots comprising this area are as follows (from most northern westly corner):

- Lots 1, 2424, 2593, 2802, 2914, 3099 and 3156 Barragoon Road, Caraban privately owned by “Moore River Company Pty Ltd – Marcus Plunkett and Graeme Sampson”
- Lot 2481 privately owned Frank Roberts
- Lot 2149 privately owned Tania Silvestro, Tanya Crookes, Kerry Silvestro and Fortunato Silvestro, tenants in common in equal shares.
- Lot 10692 R 39736 Nature Reserve
- Swan Loc 8185 Unallocated Crown Land
- Lot 10651 Reserve 39411
- Lot 5611 F 65 Proposed 5 (1) (h) reserve and proposed Conservation Park
- Lot 10652 R39412
- Lots 9755, 9756, 9757: R49994 Conservation Park

3 Outcomes

3.1 Biodiversity

The proposed park will consolidate the north-south nature corridor along the coast between Two Rocks and the southern bank of the Moore River Estuary. It represents a coastal limestone ecosystem that has been, or is planned to be, heavily cleared and developed. It will therefore maintain large-scale ecosystem processes with benefits to many native plants and animals including endangered and threatened species of the Swan Coastal Plain. By creating a large and continuous wildlife corridor, the park will help protect against coastal erosion as sea levels rise and enable species to move south as temperatures rise and rainfall reduces even more in future. In time the park could be considered a coastal version of Kings Park offering refugia for species affected by nearby development.

3.1.1 **Stygofauna and troglofauna** (Subterranean invertebrate fauna).

The proposed park area contains aquifers within the Tamala Limestone which form part of the Gngangara Groundwater System which is an integral part of Perth’s drinking and non-potable water supply. These aquifers are also home to stygofauna and troglofauna which occur in dissolution cavities. These invertebrates are known to have very high diversity and endemism, with new species commonly being described every time an investigation is made prior to development. Unique species associated with Tuart root mats were discovered at Yanchep and it is very likely that an investigation of the proposed park area would encounter unique species as their range is often very limited (Department of Environment and Conservation 2012).

3.1.2 Aquatic invertebrates

DWER’s environmental monitoring program and other research in the Gngangara Mound area has identified a number of species of aquatic invertebrates new to science, including some that are listed under the Australian Government’s *Environmental Protection and Biodiversity Conservation Act* and the state *Wildlife Conservation Act* (Department of Environment and Conservation 2012) The proposed park area (including the area south of

the Moore River estuary) is likely to include groundwater-dependent ecosystems (GDEs) containing locally endemic and therefore vulnerable aquatic invertebrate fauna. GDEs provide links with other wet areas in Australia and to Asian flyways and are therefore important links for wildfowl. The proposed park provides opportunity for further research and the development of management strategies to maintain this important part of the Swan Coastal Plain's biodiversity.

3.1.3 Tuart Woodlands

The proposed park area contains multiple isolated patches of undisturbed Tuart trees in addition to the significant stands of Tuart vegetation with connectivity along the Moore River at the northern boundary of the proposed park, as documented in the Tuart Atlas (Government of Western Australia 2003). This can be seen in aerial photographs supplied by The Friends of Moore River Estuary (FOMRE), (in Appendix 4). The decline of Tuart stands caused by clearing, disease and the drying climate on the Swan Coastal Plain is cause for concern, not least because of their role in supporting TECs including aquatic root mat communities and an endangered community, the *Melaleuca huegelii* – *Melaleuca acersoa* shrublands (Department of Environment and Conservation 2012).

3.1.4 Banksia Woodlands Ecological Community

Eighteen complexes that contain a significant Banksia woodland component have been identified south of the Moore River. An indicative distribution map (Department of the Environment and Energy 2016) suggests that some of the most densely connected patches of this endangered ecological community occur in the proposed park area. This information is also substantiated by a map produced by the Department of Parks and Wildlife (2017), which focuses on the sub areas of the proposed park and shows Banksia-dominated woodlands covering the majority of the proposed park area (Appendix 3). As is well documented, this ecological community provides habitat for over 20 threatened species as well as ...

“help[ing] to cool temperatures in the surrounding region; store carbon; filter and maintain aquifers, including those supplying drinking water for Perth; mitigate local flooding, soil loss, and pollution; and, provide amenity and recreation such as scenic areas for bushwalking. The ecological community also can support soil health, crop pollination and pest management” (Department of the Environment and Energy 2016, p.3).

Aerial photographic records generated by FOMRE indicate the likely presence of Banksia Woodlands TECs in the private lots at the northern limits of the proposed park (Appendix 5). Systematic current surveys are required to determine the significance and condition of the Banksia Woodlands on this land.

3.1.5 Carnaby's Cockatoo

Banksia woodlands of the Swan Coastal Plain have always formed part of the foraging area for endangered Carnaby's Cockatoo (Valentine and Stock 2002). Carnaby's Cockatoos have more recently shifted their breeding to the Swan Coastal Plain with most nests being in Tuarts. The paucity of nest sites, exacerbated by clearing and by introduced hollow-

nesting fauna, such as European Honey Bees (Johnstone and Kirkby), has been highlighted as one of the many critical pressures on this species. The proposed park includes important foraging areas and potential breeding sites for this species.

3.1.6 Preservation of wetland riparian zone around the Moore River and estuary

The inclusion of the land on the south bank of the Moore River near its estuary provides a long-term opportunity for managing increasing threats to the riparian-zone vegetation with consequent positive outcomes for water quality of the river and preservation of TECs. The Department of Conservation and Land Management's Biodiversity Audit of Western Australia (McKenzie, May and McKenna 2003) lists the Moore/River Gingin Brook wetland as a Wetland of Subregional Significance.

3.2 *Yued Cultural Heritage and Employment*

The proposed park is part of the Yued traditional land and is included in the Yued Indigenous Land Use Agreement as a part of the South West Native Title Settlement (currently under judicial review, Southwest Aboriginal Land and Sea Council (SWALSC), 2019). We understand that SWALSC is currently in the process of identifying land parcels to be considered for inclusion, as part of the South West Settlement with the State, and that future management of the acquired land (through settlement) will vest with the Regional Corporations (yet to be established). Preliminary contact with Yued representatives indicates that some of the land to be included in our proposed regional park has been identified for possible inclusion in the future *Noongar Land Estate*. Plan for our Parks is committed to working with traditional owners and providing employment opportunities through the Indigenous Ranger Program. The proposed park would facilitate opportunities for the traditional custodians of the area to care for country and provide culturally appropriate information and interpretation to park visitors. FOMRE believes there will be a strong interest in working together to achieve these goals.

3.3 *Recreation and Tourism*

Rapidly spreading urban and industrial development on the Swan Coastal Plain means that bushland in close proximity to Perth is now highly valued for recreation and as a visual and spatial buffer from urban development. Rapid urbanisation to the south of Two Rocks has led to increasing fragmentation of habitat and other associated threats such as increased feral animals (especially cats, foxes and rabbits), increased fire risk and increased environmental weeds.

The proposed park area has come under growing pressure from 4-wheel-drive vehicle users and recreational fishers seeking access to the ocean. The volunteer Wilbinga Shacks 4x4 Crew work with the Department of Biodiversity Conservation and Attractions (DBCA) to encourage responsible 4 Wheel Driving, rationalise tracks and do an annual clean-up of the Wilbinga Conservation Area (through a Motorised Recreation Adoption Agreement, Department of Parks and Wildlife, 2014). The proposed park would recognize the current value of the land for a range of recreational users and facilitate appropriate management, thus complementing the popular Yanchep National Park, in addition to providing further opportunities for community engagement and education.

3.4 Beekeeping

Honey collection may be one of the current uses of the land proposed for the park. Given concerns about honey bees becoming feral under some conditions, the proposed park would facilitate management through liaison with apiarists, to enable the goal of more efficient and sustainable use of apiary sites.

4 Constraints

4.1 Managing conflicting user values

Restrictions on beach access might need to apply seasonally or in particular locations or at given times, such as when birds are nesting.

The planning area is within a zone which may be vulnerable to the establishment and persistence of *Phytophthora cinnamomi* or jarrah dieback. Recreational use such as off-road vehicles and bushwalking are known to increase the spread of jarrah dieback and will need to be carefully managed to reduce the threat to susceptible flora (Commonwealth of Australia 2016). Tuart trees are susceptible to both *Phytophthora multivora* and to root and collar rot caused by the soil-borne fungus *Armillaria luteobubalina*, both of which can be spread by soil.

4.2 Acquiring private land

The Moore River Company Pty Ltd (MRC) land constitutes the immediate freehold land in need of purchase. Development of a sub-division with 1,940 lots has been approved for this land. The development process has been prolonged (25 year) and controversial. Development proposals were initially rejected by Western Australian Planning Commission (WAPC), a decision which was upheld by the State Administrative Tribunal. It proceeded as a result of intervention by John Day, the Planning Minister in the Coalition government at the time, and the threat of a lawsuit. It is a development which contravenes many current state planning guidelines and policies (State Planning Policy No. 3 Urban Growth and Settlement and State Planning Policy No. 2.6 State Coastal Planning). It has had strong community opposition throughout. The development would result in considerable environmental damage. The WAPC has now imposed onerous conditions which makes the area very costly to develop. The property was put on the market four years ago and has been advertised internationally to no avail. Baroota Pty Ltd which has control over MRC is in voluntary administration and has appointed Graeme Sampson, a director of MRC, as liquidator. MRC could well be open to government acquisition of the land.

4.3 Tenures on some lots may require land to be added later

The purchase of lots 2149 and 2481 could be delayed until such time as the opportunity arises to purchase. Adjacent freehold land could also be added as opportunities arise to purchase, thereby adding conservation value as well as providing further ecological linkages within the reserve.

5 Conclusion

The proposed park presents an opportunity to safeguard the remaining unique terrestrial, aquatic and subterranean biodiversity of the Swan Coastal Plain in a north-of-the-city coastal version of Kings Park. The proximity to Perth of this visionary park would ensure valuable economic benefits through local and nature-based tourism and social and cultural benefits through the Yued sharing their connection to land. The potential for far-reaching benefits through carbon storage, aquifer maintenance, coastal management and mitigating the effects of the urban heat island of the adjacent metropolitan area have been discussed. Unifying management of this area (e.g. fire management and regeneration of native species) and including the southern banks of the popular Moore River Estuary ensures that this park will become an important nature sanctuary for future generations of Western Australians.

6 References

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7 Appendices

Appendix 1: Map 1 Proposed Park Area showing lots and Shire Boundaries Excerpt of Landgate Map View 1 Sheet no 2035-III Shire of Gingin and City of Wanneroo

Appendix 2: Map 2 Proposed Park Area showing tenure and management of land. Landgate Map Moore River and Gingin Map 2035-3 and 2035-2

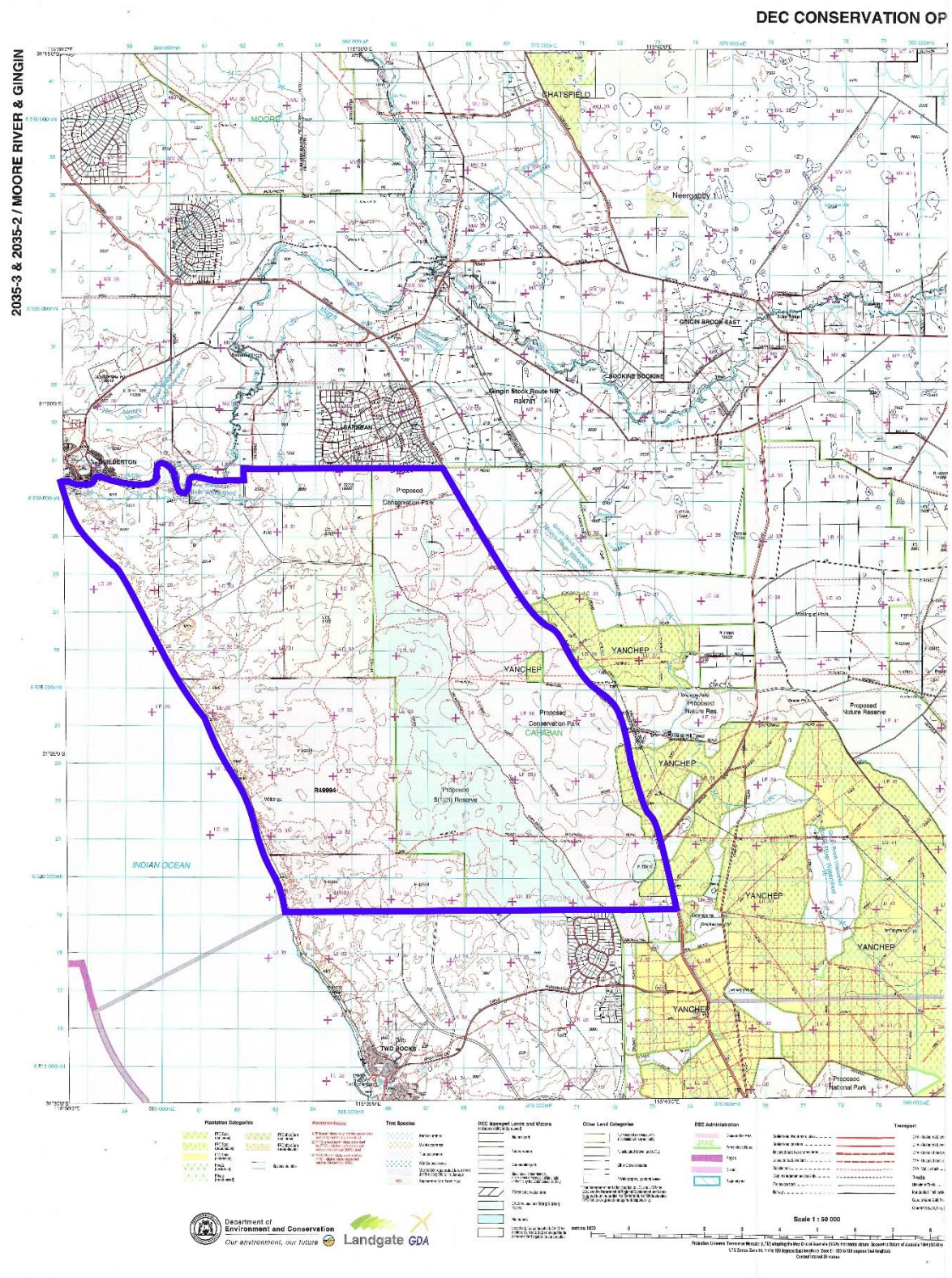
Appendix 3 Map 3 Showing Bankia dominated woodlands on proposed park area. Excerpt from Department of Parks and Wildlife (2017)

Appendix 4 Arial photographs of proposed land bordering south bank of Moore River Estuary and showing tuart patches

Appendix 5 Arial photographs of proposed land bordering south bank of Moore River Estuary and showing banksia woodlands

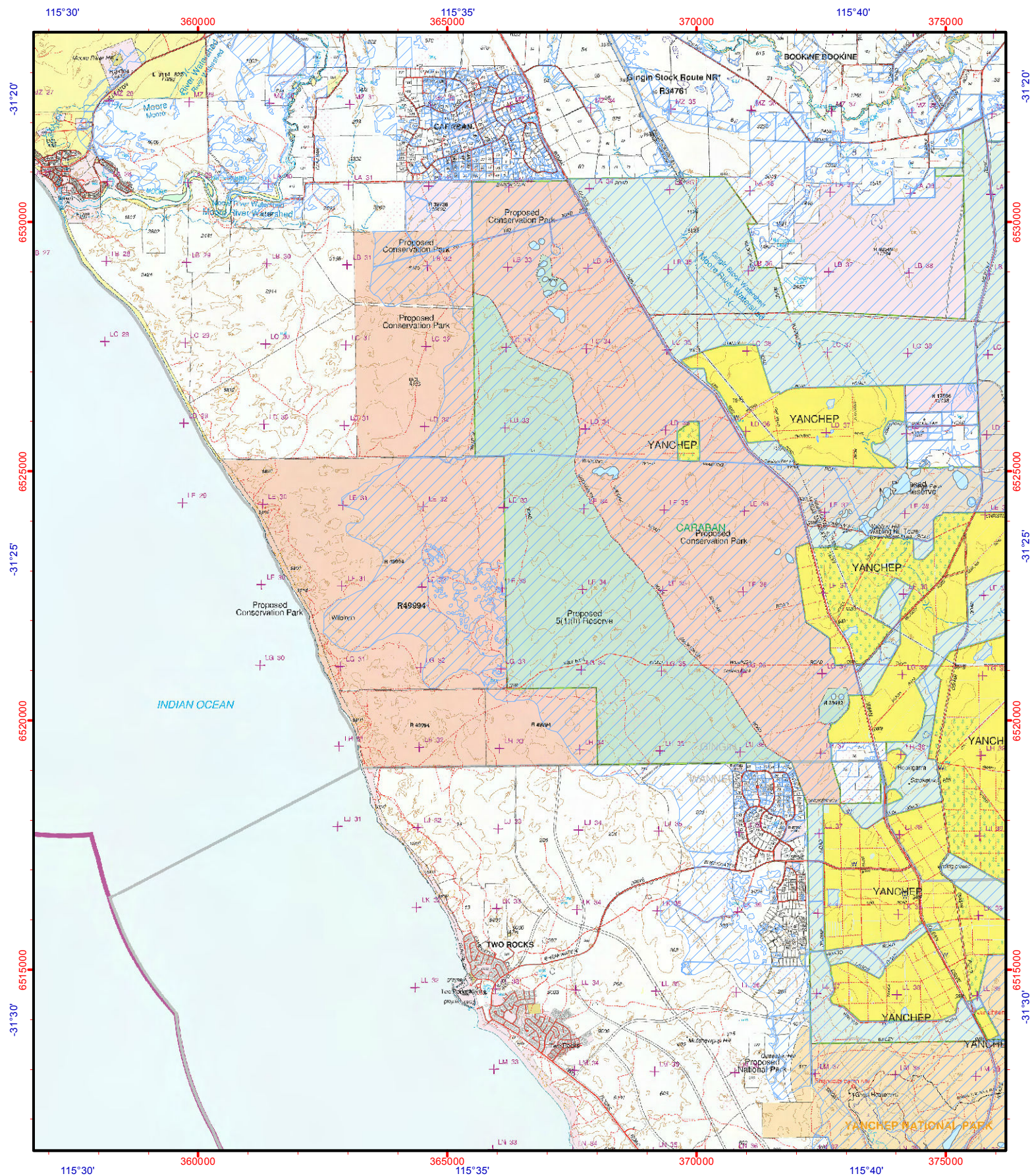


Appendix 2: Map 2 Proposed Park Area showing tenure and management of land.
Excerpt from Landgate Map Moore River and Gingin Map 2035-3 and 2035-2




Key: Pink shaded = Conservation Park, Green shaded = CALM Act sections 5 (1) (g) & 5 (1) (h), Pale Yellow shaded = Unallocated Crown Land, White = Private property, Bright Yellow with tree symbol = FPC State Coniferous

Appendix 3: Map 3 Showing Bankia dominated woodlands on proposed park area.
Excerpt from Department of Parks and Wildlife (2017)



Graticule shown at 5 minutes intervals
Grid shown at 5000 metre intervals

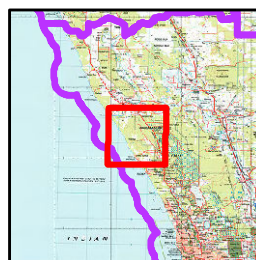
 Banksia Dominated Woodlands
of the Swan Coastal Plain IBRA Region



(A4)

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Kilometres

Projection: Universal Transverse Mercator
MGA Zone 50. Datum: GDA94



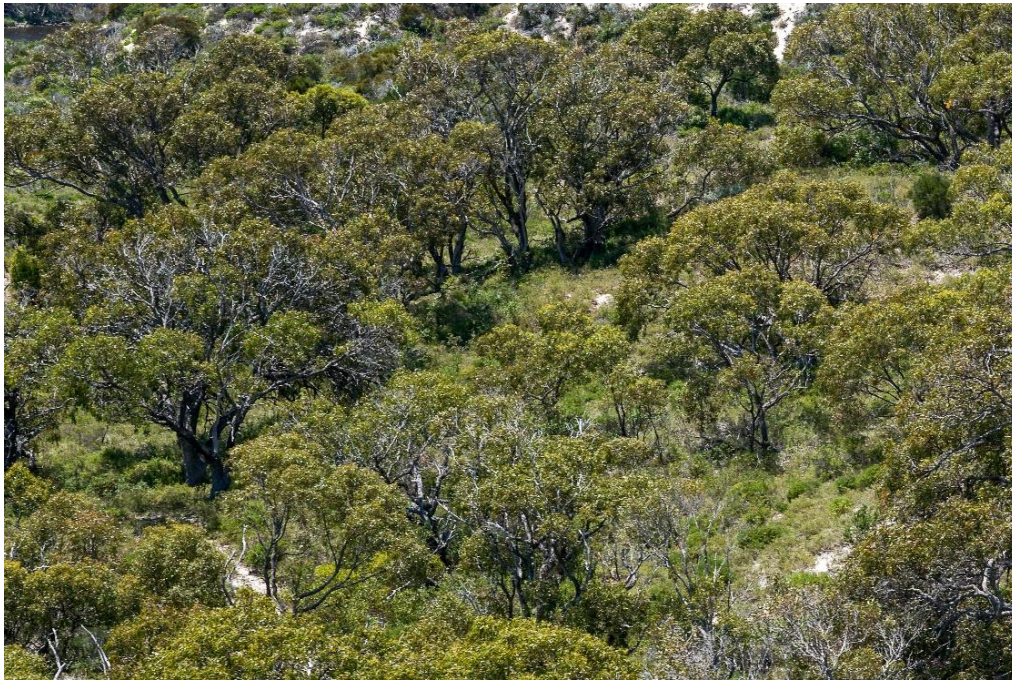
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Appendix 4: Aerial photographs of proposed park land bordering south bank of Moore River Estuary showing tuart woodlands at 3 sites (FOMRE archives)



Appendix 5: Aerial photographs of proposed land bordering south bank of Moore River Estuary and showing banksia woodlands (FOMRE archives)

