

Submission
No 92

**INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS
OF CLIMATE CHANGE ON THE ENVIRONMENT AND
COMMUNITIES**

Organisation: Total Environment Centre

Date Received: 3 November 2023

Submission to Inquiry into the planning system and the impacts of climate change on the environment and communities :

Greenspace planning for Sydney and beyond.

Submission by **Total Environment Centre** to the **Planning and Environment Committee of the Upper House of the NSW Parliament**. Issues addressed in the terms of reference emboldened.

(a) developments proposed or approved:

- (i) in **flood** and fire prone areas or areas that have become more exposed to natural disasters as a result of climate change,*
- (ii) in areas that are vulnerable to rising sea levels, **coastal** erosion or drought conditions as a result of climate change, and*
- (iii) in areas that are **threatened ecological** communities or habitat for threatened species*

(b) the adequacy of planning powers and planning bodies, particularly for local councils, to review, amend or revoke development approvals, and consider the costs, that are identified as placing people or the environment at risk as a consequence of:

- (i) the **cumulative impacts of development,***
- (ii) climate change and natural disasters,*
- (iii) biodiversity loss,** and*
- (iii) rapidly changing social, economic and environmental circumstances*

(c) short, medium and long term planning reforms that may be necessary to ensure that communities are able to mitigate and adapt to conditions caused by changing environmental and climatic conditions, as well as the community's expectation and need for homes, schools, hospitals and infrastructure

(d) alternative regulatory options to increase residential dwelling capacity where anticipated growth areas are no longer deemed suitable, or where existing capacity has been diminished due to the effects of climate change

Introduction

Population: Before CoVID, Sydney had been growing at about 100,000 people a year for a decade, that growth rate was very difficult to plan for. After CoVID, Sydney would be growing at about 200,000 people a year, which makes planning impossible. To cope with that scale of population increase, you plan with ‘tents’. This federally driven ‘housing crisis’, is being weaponized by the major developers to further undermine planning restrictions. While the demand side of the ‘planning’ equation - population - is outside the state’s jurisdiction, the state must raise a voice in this predicament as it carries all the responsibilities for the federal government’s lack of control.

Place: Our focus here is on Sydney, though not exclusively. Sydney is special as it’s two major rivers, the Georges and the Nepean, skirt the city, and thus it has been able to grow while: keeping its rivers relatively clean, food bowl and much of its biological richness intact, while acting as a biodiversity or Koala belt to the city. As urban sprawl pushes into these areas the cities sustainability and liveability is threatened.

Planning: What is the point of planning ? If planning does not orbit around societal goals, such as improving environmental outcomes, then it’s redundant. If it is primarily focused on spot rezoning on behalf of large property owners, then the planning department is no more than a gatekeeper for rent seekers, and a drag on the ‘commonwealth’ and smaller property owners. In that case green spaces considerations would be better enforced by another agency. The state government’s move to separate Environment from the Planning department is a good step to address this. Greenspace issues are now often concerned with connectivity across the landscape, thus the Green Grid or Web has come to the fore. This submission thus looks at how to establish this to protect our riparian and coastal environments.

Content: The first step below highlights how development pressure undermines planning principles and priorities. The second step is about the importance of the Koala Green Belt for the long-term ecological health of Sydney along the two rivers of the Georges and the Nepean. Then we look at processes to ensure connectivity across the urban, peri-urban and rural landscapes, using spatial systems that work such as Vegetated Riparian Zones. The fourth step is ensuring we secure existing greenspaces: parks, sporting fields and trees. Finally we look at the importance of boundary lines and large lots to ensure wildlife survives on private land in rural and peri-urban environments

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1st Step: Stop the development pressure, pushing out Sydney's urban footprint.

Dismantle the agency capture of the Department of Planning by the major developers, you can't plan for the public interest otherwise : Otherwise Sydney's footprint will continually enlarge and public land will continually be under pressure, as large scale rezoning of rural land is the easiest and largest windfall profit.

Currently the major developers business model is their control over the planning department.

The *Greater Macarthur Growth Area* is a prime example of this. It was only declared a growth area by Planning Minister Roberts as the larger developers Lendlease and Walker had land-banked the area. Macarthur is not an area you would prioritize for housing, it is easily the most distant suburb of Sydney, with no rail, yet situated within the headwaters of Sydney's two most important rivers, an endangered Koala colony and surrounded by deep indigenous and frontier heritage.

When Wollondilly Council opposed Walker's large-scale rezoning around Appin. The planning department took it out of their hands, and fast-tracked the development. Every 'crisis' has been used as an excuse to fast track approvals for Walker. Under CoVID Appin Macquariedale was fast tracked by the Planning Minister Stokes, and recently because of the 'Housing Crisis' Walker's Appin Precinct was fast tracked by the Planning Minister Scully.

The bureaucratic capture of planning is probably even more profound. Walker's Appin Precinct and Lendlease's Gilead in Macarthur followed a Technical Assurance Panel (TAP) program which was set up by Planning to speed up the approval process of these larger projects. TAP's major metric was how fast they had approved the projects about 9 months, not if Koalas would be left with a viable landscape in which to survive (they don't), nor if an appropriate landscape curtilage for one of Australia's major historical turning point - the Appin massacre was large and intact (it isn't).

The Greater Macarthur Growth Area vision too was driven by ex-Planning Director Brendan O'Brien and Planning Secretary Michael Cassel who now lead development in Macarthur for Lendlease and Walker respectively. This must cast doubt on the Planning Department's ability to prioritize environmental, heritage & watershed protections above developers demands. Mike Freelander MP the local federal member is so concerned regarding planning in South West Sydney he has called for a [Royal Commission into NSW Planning](#). It is also deeply concerning that this industry pressure now appears to be undermining a coherent population strategy at the federal level.

Possible actions to remove incentives:

1. Tax value uplift from rezoning. If private land is to change from an open space zoning such as rural to a built one such as residential, a windfall profit tax must be applied to the uplift in value. Victoria's **'Windfall Gains Tax' for rezonings** (WGT) commences 1 July 2023. NSW's Regional Infrastructure Contributions: complex does not tax just the rezoning beneficiaries.

2. **All Public land if sold must be Auctioned.** No unsolicited approval processes.

Actions to clean up process:

3. Separate out Environment from the Planning department, so the department doesn't propose an idea and then self assess which planning does now.

4. Required ecological assessments should not be conducted and then assessed by the same organization ie. NSW Planning for the Chief Scientist's Koala protections, or the proponent's own consultant such as Lendlease's Eco Logical for Lendlease's Koala Plan of Management.

5. **Public Notifications** removed during CoVID should be reinstated for large DA's and Planning Proposals.

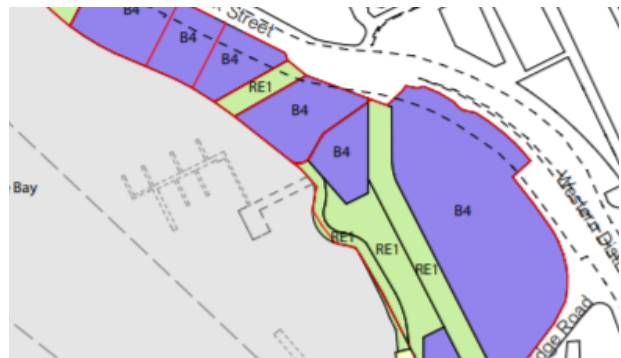
6. A **Metro-Council** or Green might help with approval for metro scale objectives: like a Green Grid.

7. Use **Absolute setbacks** or **greenspace percentages**, clear and easily assessable,

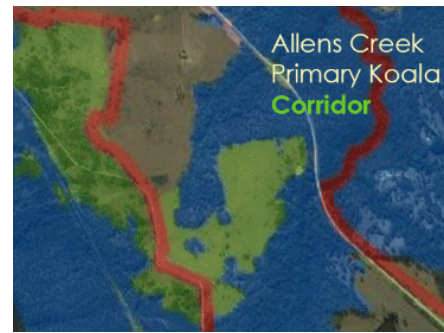
8. **Staff capture** need to sever conflict of interest issues ? Ban staff from moving NSW Planning to a Major Developer. And if Senior staff moves then related approvals must go be re-evaluated.

9. **Third party appeal rights** expand ability and state funding, acts as policing to contraventions.

Cautionary Tale - Blackwattle Bay
Public Foreshore is being rezoned and sold off: All of this area is public foreshore except the four top properties, yet it is all being rezoned for residential towers. Its first priority should be ensuring the foreshore greenspace is protected and enlarged. NSW Planning the Consent Authority. Approval 2022 is ongoing.



Cautionary Tale - Priority Conservation Land removed: *Urban Development Zone* at SE Wilton at Wollondilly, has seen land rezoned without constraints, and **Priority Conservation Land** promised to offset the loss of previous greenspaces are being lifted. The *Conserving Koalas* report recognised Allens Creek as a Koala Corridor. Previous promised protections need certainty.



2nd Step: Establish Sydney's edge - Koala Green Belt

Sydney needs to protect its interior river edge, the Georges and Nepean Rivers and where they almost meet near Campbelltown. A **Koala Green Belt** mitigates Sydney's water source from pollution and flooding, preserves Sydney's Food bowl, Frontier landscapes, Biodiversity habitat and corridors. Planning has not been successful, work outside of Planning to secure riparian and coastal foreshore.

Koala Green Belt - Declare Sydney's Great Koala walk : Botany to Pittwater via the Nepean-Hawkesbury & Georges River, encircling all of Sydney, via Macarthur

- a. Georges River Koala National Park (secures Georges for Koalas)
- b. Nepean - Hawkesbury (Deerubbin) riverbank wildlife corridor greenspace.
- c. Two Rivers Frontier Koala Park (Nepean to Georges link via Macarthur)

Sydney's Vision - Sydney's Koala - Whale Circuit: Sydney's unique morphology circumnavigated by its two largest rivers the Hawkesbury-Nepean River (Deerubbin) and the Georges River (Toggerai) makes it a hotspot of marine and terrestrial biodiversity, and provides the basis for the Koala Green Belt. **Koala corridors** are part of the **peri-urban** Blue Green Grid conservation requirements drive their widths around 400m, and the lines they follow are riparian zones (creeks and rivers). **Sydney's Koala Belt** - to enforce a new Green Belt.

Sydney's Whale Walk along Sydney Harbour and Coast, The combination of the two will create the world's first city circumnavigation walk - **Sydney's Koala - Whale Circuit** encircling all of Sydney.

- i. **The Whale Harbour & Coastal Setback** - The historical setback for coastal development has been 30m (100 ft) foreshore reserve - this needs to be the obligatory standard it used to be.
- ii. **The Koala Riparian Setbacks** - outside the two rivers, riparian setbacks need to be quintupled in order to create habitat corridors including about

400m required for Koalas. This also helps protect the major rivers from pollution and homes from flooding.

Positive Example - The Great Kai'Mia Way : A vision of [over 200 kilometres](#) of pathways around Botany Bay, Georges River and the Woronora River. Plans to link about 75% of the track already existed as fire trails, cycleways, and service roads for various utilities into one spectacular trail. Planning NSW's *Georges River Foreshores Improvement Program* funded the Sutherland Environment Centre to conduct a feasibility study - the Great Kai'Mia Way launched in 2002. The project has given vision for many years to councils, government agencies and community groups, as a project that has incorporated natural systems into municipal planning.

Cautionary Tale - Sydney's Greenbelt: From 1948 lasted about 20 years, the scenic hills zoning south of Campbelltown lasted longer, but has recently been lost and now threatens the sustainability of NSW's largest recovering Koala colony in South West Sydney. Both of these losses came from the pressure of large property developers. Zoning of private land has offered weak long-term protection. The edge of Sydney's real protection has been the establishment of **National Parks** to the west, north and south (Kuring Gai and Royal National before 1900.).

Foreshore Reserve 100ft Public reserve : The Water Management Act's setback requirements are excluded from the harbour's edge, they shouldn't be. At least public lan, and large areas of private land should have to meet the Act's requirements or the historical *Thomas-Mitchell 100ft public reservation* benchmark. And waterfront lots with existing use rights should have to justify the intrusion, or perhaps smaller setbacks. Barangaroo and Blackwattle Bay developed on public land have/are crowding the foreshore. And Council Foreshore Plans established in the 2000s to accommodate Sea Level rise have achieved little.

3rd Step: Establish a Blue-Green Grid to connect green spaces

A green grid can most effectively be implemented if tied to a linking line spatial framework¹, it can then use those lines as a reference for **setbacks** thus establishing a fair and easily assessable criteria for implementation. This simplicity underlines the successful uptake of the Water Management Act's *Vegetated Riparian Zone* along Creeks and Rivers on Sydney's periphery and beyond. Spatial line networks we have identified in the landscape in order of ecological importance are: **Watershed, Transport and Property lines**.

¹ Bennett, Andrew (2003) [Linkages in the Landscape The Role of Corridors and Connectivity in Wildlife Conservation](#) International Union for Conservation of Nature

The importance of spatially linking lines for transport and water is recognised in the relative power of both institutions; Water NSW and Transport NSW. These organizations think in network (line) terms and need to secure them in order to function efficiently, these are the same structural demands as the Green Grid. Planning NSW and Councils are area planners, a spatial framework of more marginal importance to establishing a green grid.

Sydney's veined watershed already connects much of Sydney's parks and bushland - the **Blue - Green Grid** these vegetated riparian zones need to be large and absolute setbacks - 5 points:

Watershed Green Setbacks: Along the Koala Green Belt. Chief Scientist recommendations: 450m back from Rivers, 450m across creeks. Restoration (biobanks) set with these setbacks. The CPCP needs set-out conditions, Independent monitoring and assessment. Mac. Koala corridor attributes : Numbers (at least 5), Width (at least c.400m), Integrity (at least C2 zone).

Remnant Bushland Connection: protected, tied back to watershed vegetated riparian zones with 200m wide linkages.

Biobanks: last resort, additional, upfront, contiguous. used to restore corridors.

Watershed - Blue Green Grid : Vegetated Riparian Setbacks: In the 1990's Benson & Howell² proposed a native vegetation setback along riparian zones that was incorporated into the **NSW Water Management Act**, with its main purpose being to ensure riparian banks' structural stability. However, it has become the de facto generator for wildlife corridors across NSW. In addition, it also serves green grid purposes, helping to mitigate dangerous flooding, improve water quality, and if around the harbour or coast accommodate sea level rises. The success of the Water Management Act's **riparian corridor setbacks** is that setbacks are an objective and simple instrument.

The criteria for implementation are clear enough that the diagrams below can explain it. The vegetated riparian zone is determined by setback from the bank of the creek or river, that is set by its Strahler order (a proxy for its size). See images below.

² Benson, D. H & Howell, Jocelyn, 1944- & Royal Botanic Gardens (Sydney, N.S.W.). 1993, *A strategy for the rehabilitation of the riparian vegetation of the Hawkesbury-Nepean River* Royal Botanic Gardens Sydney

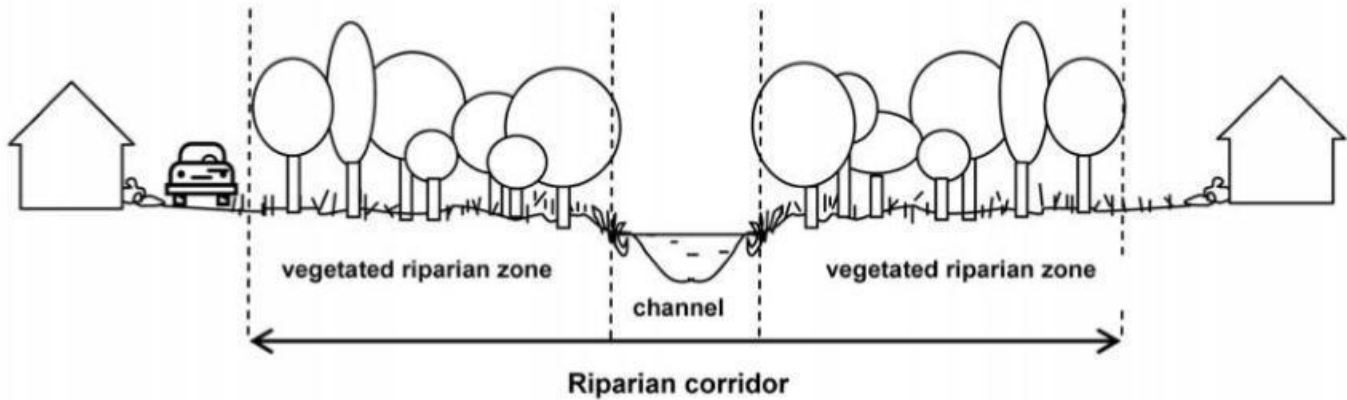


Figure: **Vegetated Riparian Zone.**

Figure 2. The Strahler System

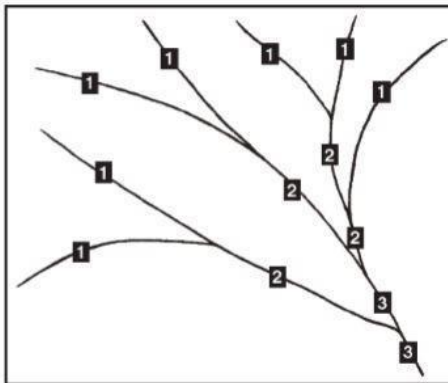


Table 1. Recommended riparian corridor (RC) widths

Watercourse type	VRZ width (each side of watercourse)	Total RC width
1 st order	10 metres	20 m + channel width
2 nd order	20 metres	40 m + channel width
3 rd order	30 metres	60 m + channel width
4 th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)	40 metres	80 m + channel width

Note: where a watercourse does not exhibit the features of a defined channel with bed and banks, the Office of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act

Figure: **Stahler Setback Widths**

Green infrastructure like most monopoly infrastructure is most effective in public ownership. The **Blue-Green Grid ownership** within the peri-urban and urban scape should be shared between **Water NSW** and **Council**. Riparian zones work at the local and regional scales, Water NSW is not local enough, while Councils are too local.

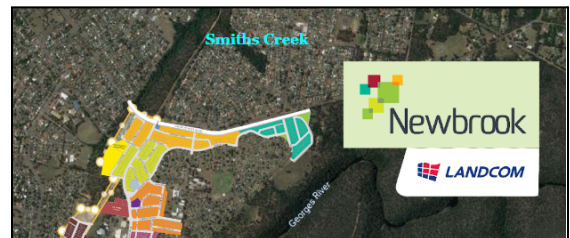
Controlled activities – Guidelines for riparian corridors on waterfront land - riparian corridors administration is regulated by the *Water Management Act 2000* (WM Act) administered by the Department of Planning and Environment which requires a

Vegetated Riparian Zone (VPZ) setback. A *Controlled activity approval*³ must be obtained if you impinge on riparian zones. New South Wales government in mid-2012 allowed a 50% intrusion into the VRZ if offset elsewhere in the RPZ; this needs to be removed.

Urban creeks and rivers should be looking at elevating the importance of the riparian zone so it can be clawed back in new developments. They have been specifically excluded from the Sydney Basin; these exclusions need to be removed. So, new developments must comply, and legacy buildings, need to justify hurdle an intrusion, and development incentives offered if they stay clear of the zone.

Koala Belt Blue-Green Grid would be most effective if based off a multiple of the Water Management Act's Riparian setbacks, about 5 times wider would meet the minimum koala requirements, enabling the vegetated riparian zones to act as Koala refugia and corridors. So the Strahler 4 setback of 40m becomes 200m (40m x 5), and counting both sides this setback creates a koala corridor of 400m. Using the watershed Strahler system means the Koala

Cautionary Tale - Newbrook: is a Landcom NSW government selling off the riparian zone that acts as a Koala corridor at Smiths Creek in Campbelltown. Approved for sale in **2015** UrbanGrowthNSW and Landcom.

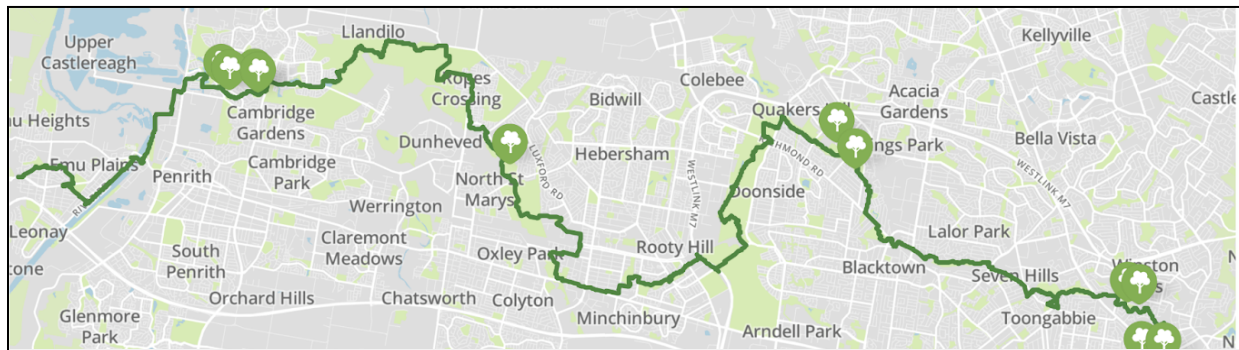


Cautionary Tale - Mallaty Creek : Koala Corridors killed off rather than strengthened. Corridor D (Mallaty Creek) in Gilead is a unique Koala corridor, it has an independent connection to the Nepean River, and bushland on both sides of Appin Rd. However, the *Cumberland Plain Conservation Plan* will fence Koalas out of this corridor, as the width does not meet the Chief Scientist's recommendations ?! Rather than rectify this problem with restoration.



Positive Example - The Great West Walk: 150km walking track from Parramatta Park to Katoomba. Following wherever possible rivers such as the Parramatta and Nepean and creeks that include Toongabbie, Breakfast, Eastern and Ropes Creek. The Great

West Walk was mapped by Walking Volunteers and strongly supported by State Government agencies, and local Councils. In 2021, the department partnered with Blacktown, Penrith and Parramatta councils, Greening Australia and Landcare NSW.



Positive Example : Victorian Crown Frontages : Victoria has a unique network of public riparian land known as Crown frontages (owned by the State), which were mostly established between the 1850s and the 1880s, in recognition of their value as a public resource. Crown frontages occur mostly on larger waterways. On smaller waterways in agricultural landscapes, riparian land is usually privately owned. The total area of Crown frontage in the state is about 100,000 hectares, which is only 0.4 per cent of the State and 1.1 per cent of the total public land estate.

4th Step: Density requires public and private greenspaces be valued and protected.

The urban footprint of Sydney's population of 5m is big : 2000km² (200,000Ha), an area that extends from Penrith to Campbelltown to Hornsby. Other denser cities have kept their greenspaces ie:

- London, a city of terraces, has a population twice that of Sydney, but a footprint that is a bit smaller at 1500km². Terraces provide individual households with greenspaces, with a greenbelt that surrounds the city.
- Singapore, a city of high rise residences has a similar population to Sydney but only a third of the area at 750km², it has focused green streets, and public parks around high rises to maintain its greenspaces.

The state government promised to go 'up not out', however one of Paul Scully's first announcements was the largest single approval of urban sprawl in recent memory with the Appin Precinct. Both London and Singapore have been able to limit sprawl and this has allowed consolidation. Sydney's continued concentration on urban sprawl retards consolidation, as department capacity and state resources are diverted to the massive infrastructure and assessment requirements needed for greenfield sites. Walker's Appin rezoning effectively comes at the opportunity cost of the Leumeah station just up the road missing out on consolidation.

Higher density achieved along existing arterial routes and large greenspaces, and subdivisions within existing suburbs, increases housing within Sydney's existing footprint and releases value for everyday land holders, not just large developers seeking rezoning windfalls on Sydney's rural-urban edge. But to ensure greenspace:

City lots should insist on a minimum 10% of site with deep soil provision greenspace (Tree growable)

Transport: Vegetated Road Reserves: Roads are one of the most destructive elements in the **habitat fragmentation** process, and thus the Roads authority has an obligation to rectify the damage. Road reserves often protect high-value remnant habitats which ironically are well-placed to improve habitat connectivity⁴.

The Department of Transport is one of the most powerful state agencies in NSW. Large Roads provide the missing link in connecting watershed greenlines. The Green Grid / Transport overlap here is **Active Transport** and Faunal links (Wildlife Crossings for all new major roads or upgrades). These Green-Active Corridors need to be embedded within Transport goals so that they become auxiliary achievements to providing rail and road links. For Transport NSW green road reserves would provide space for active transport links, runoff (WSUD), wildlife corridors and crossing opportunities, and a setback reserve strategy to future-proof future infrastructure demands⁵.

Urban setting: The concept of "pervasive greenery" as championed in Singapore's *Streetscape Greenery Master Plan* should be adopted; it, in essence, asks developers to *insert greenery wherever they can*. On the edge of the city and in the country, *road reserves on either side of the road that are as wide as the road itself*, must become the norm. So all the green grid benefits get built into the road framework from the start.

Positive Example : Georges River Parkway. Road reservations themselves have provided the backbone for the revival of Koalas in South West Sydney. **Georges River Parkway** is land owned by the Office of Strategic Lands that will provide the backbone of the Georges River Koala National Park. (It is shown as the yellow line that separates the pink residential area from the yellow areas)

Green Space protection - Stop the sale and rezoning of sporting places : Golf courses in particular are under intense pressure to change their zoning as these institutions are often under financial pressure but sitting on property worth hundreds of millions of dollars. State government must be able to bolster zoning, or bring the

⁴ Viles R.L & Rosier D.J.(2001) *How to use roads in the creation of greenways: Case studies in three New Zealand landscapes* *Landscape and Urban Planning*, 55 (1) , pp. 15-27.

⁵ Black, John (UNSW), Tara, Kam (UNSW), & Pakzad, Parisa (2016). *Mainstreaming Green Infrastructure Elements into the Design of Public Road Reserves*. *International Journal of Environmental Protection* 6(1), 1-15.

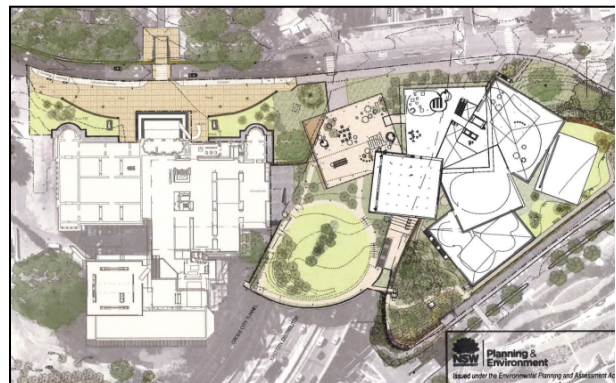
properties into the park and greenspace regime of the city before they are lost.

Other underutilized or exclusive sporting greens tennis, lawn bowls, etc. must be re-imagined as new multiple-use green spaces. The government must not rezone these spaces to residential. Nor allow loopholes like seniors housing to see open space turned into residential. If institutions are struggling, these grounds should be acquired by the state for alternative green space purposes. Mechanisms are required for blocking rezoning.

Value trees, green spaces and links: No value is placed on the mature landscape. Therefore we get *Park Shaving* - the slow but cumulative loss of parkland to other functions. Greenspace is being seen as free space. While trees have inherent values, they need a rough monetary value, so they can enter the cost-benefit equations considered in costing. A standard needs to be accepted for the whole of NSW, examples: [City of Melbourne Tree Policy](#), [Urban Tree Valuation - Treenet](#).

While biobanking is applied to large projects which we haven't gone into here, for consistency in policy all trees and greenspaces must also be given a monetary value as well so they are not seen as of zero value, in development appraisals. These values need to be part of the evaluation process within the Treasury and the *Independent Pricing and Regulatory Tribunal* (IPART) when approving council contribution plans.

Cautionary Tale: Sydney Modern Park Shaving Even Domain greenspace is being lost. **Sydney Modern** has a footprint similar in size to the Art Gallery of NSW next door, thus almost **2 acres** of green space in the domain is lost with **140 mature indigenous trees**, while the green corridor that reaches out to Macquaries Chair is pinched here. Approved by NSW Planning in 2018 and completed in **2022**.



Cautionary Tale: Sydney Football Stadium Park Shaving. Moore Park's open space is being built on. The Lendlease's new **Sydney Football Stadium** is over 3,000m² bigger and the new ancillary building has a footplate of about 2,000m². The mature figs that skirted the stadium were removed. Completed in **2022**



5th Step: Generate bushland corridors across peri-urban and rural property

'Obligation to Landscape', reward landholders who look after land not those who don't.

If property over 1000 sqm, a minimum of 10% of land must be dedicated to native vegetation, to secure connectivity, they need shape as well and thus follow existing landscape lines such as those outlined previously:

1st: Watercourses (Water NSW vegetated riparian setbacks),

2nd Property lines (the 25m bush clearance from property lines must go)

3rd Connect to existing bush copse.

Within the Koala-belt, and the peri-urban edge the lots should be big enough to have trees ie. 3200 sqm. Larger lot sizes means Koalas & residents can co-exist as seen in Wedderburn & Wilton.

Property lines as vegetated setbacks: Property lines are not controlled by one authority, but by a multitude of private owners, this makes it harder to control but simple setback arrangements could see this line framework fold into the green grid in rural areas. Unfortunately, this has been exercised in the negative with the [Rural Boundary Clearing Code](#), which does precisely the opposite, as it allows for the removal of vegetation 25m out from the boundary line. The [10/50 vegetation clearing](#) rule was established to protect the house, the larger capital investment on property.

The **clearing code must be repealed**, if applied where allowed it would do untold ecological damage. Property lines should instead be the basis for a green grid in the rural setting; most farms already leave a tree line along the boundary.