

INQUIRY INTO INTEGRITY OF THE NSW BIODIVERSITY OFFSETS SCHEME

Organisation: Better Planning Network Inc

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Submission to Legislative Council's Planning and Environment Committee's Inquiry into the Integrity of the NSW Biodiversity Offsets Scheme

About the Better Planning Network

The Better Planning Network (BPN) is a statewide, not-for-profit, volunteer-based organisation. Founded in 2012, BPN acts as an umbrella organisation for a wide network of member and affiliated groups from across NSW.

The aim of the BPN is to foster the development of a robust and visionary planning system for NSW - one that promotes best practice environmental, heritage, social sustainability and design outcomes.

Introduction

This submission will highlight how the [Growth Centres Biodiversity Offset Program for the Sydney Regions Growth Centres SEPP](#) has failed to halt or reverse the loss of biodiversity in the Sydney Basin, including threatened species and their habitat. It will then discuss why the [Draft Cumberland Plain Conservation Plan](#) (CPCP) - a proposed whole of landscape biodiversity offset scheme designed to facilitate the release of an additional 10,000 hectares for development - will accelerate the degradation of the Sydney Basin's unique ecosystem and adversely impact the critically endangered Cumberland Plain Woodland (CPW).

If implemented in its draft form, the CPCP will also jeopardise the future of NSW's last significant chlamydia-free koala population, conservatively impacting, by its own admission,

26 percent of koala habitat but in reality protecting only around a third of the land the Department of Planning, Industry and Environment (DPIE) said would need to be protected in its 2019 report, [Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas](#).

Whilst a wholesale redesign of the state's Biodiversity Offset Scheme (BOS) may help to reduce biodiversity loss, it must be complemented by new policies to reduce land clearing rates and strengthen protections for threatened species.

The introduction of code-based land clearing in NSW under the new Biodiversity Conservation Act 2016 (BCA Act) has led to a [13 fold increase in land clearing approvals](#). It has also [put huge swathes of koala habitat at risk](#) because 65% of koalas live on private land and only 1% of this land is now protected.

The Auditor-General, Margaret Crawford, was scathing about the environmental impact of the new laws: “The [clearing of native vegetation on rural land is not effectively regulated and managed](#),” she said, and “there is no evidence-based assurance that clearing of native vegetation is being carried out with approvals.”

The record rate of land clearing is also impacting the Greater Macarthur koala population. The Wollondilly Local Government Area, for example, has one of the highest rates of vegetation clearance in NSW. [According](#) to its Council, much of the land clearing is unauthorised and likely designed to pre-empt environmental impact assessments on land awaiting rezoning for urban development in Appin and the Wilton Growth Centre.

Land clearing is also [exacerbating](#) the effects of climate change, as recently witnessed by the out of control Black Summer bushfires which killed over a [billion animals](#) and wiped out 12 million hectares of bushland.

The Covid-19 pandemic is another likely consequence of biodiversity loss. [Emerging diseases have quadrupled in the last half-century](#), experts say, largely because of increasing human encroachment into wildlife habitat, especially in disease “hot spots” around the globe.

Australia was, in fact, the source country for the first of six major outbreaks of emerging zoonotic diseases in the past 25 years. The bat-borne Hendra virus broke out in the outer Brisbane suburb of Hendra in 1994 with additional outbreaks of the virus in 2004, 2008, and 2009 killing 83 thoroughbred racehorses and four humans. According to research cited by David Quammen in his 2012 book, [Spillover: Animal Infections and the Next Pandemic](#), the underlying cause of the transmission of the Hendra virus from bats to horses to humans was agricultural and urban encroachment into traditional wild fruit bat habitats.

Key Recommendations

- Abandon or completely redesign the Biodiversity Offset Program for large-scale rural land releases. The scheme is too risky because:
 - The timeframe for the delivery of biodiversity offsets is too long. Land purchases and biodiversity stewardship agreements are primarily funded by Special Infrastructure Contributions levied on developers and are staged to coincide with the rate of development instead of being secured upfront.
 - Lands identified for purchase as biodiversity offsets or for biodiversity stewardship agreements are typically not protected at the outset. As a consequence, they risk becoming either environmentally degraded, too expensive to acquire or are potentially rezoned for future development.
 - Biodiversity certification, which is typically used to facilitate large-scale land releases by streamlining the approval process, is not designed to accommodate subsequent changes in environmental circumstances like bushfires. Once land is classified as 'urban capable' it is no longer subject to individual environmental impact assessments by consenting authorities.
 - Biodiversity certification also exempts developers from complying with policies and regulations that offer threatened species additional protections, eg. the Koala SEPP 2021 and a council's Koala Plan of Management.
- The Growth Centres Biodiversity Offset Program must be delivered in full before the CPCP is approved. The CPCP will impact too much native vegetation on the already fragile Cumberland Plain. Due to its degraded state, the Cumberland Plain was designated as a 'first priority' offset area when the Growth Centres Biodiversity Offset Program was biodiversity certified by Commonwealth under the Environment Protection Biodiversity Conservation Act 1999 (EPBC Act).
- The draft CPCP needs to be revised to minimise the impacts on the critically endangered Cumberland Plain Woodland (CPW) and to incorporate the Chief Scientist's recommendations for the protection of koala habitat as outlined in its April 2020 report, [*Advice on the protection of the Campbelltown Koala population*](#) 30 April 2020 (Chief Scientist's Koala Report).

Example 1: The Growth Centres Biodiversity Offset Program for the Sydney Regions Growth Centres SEPP

A brief history of the evolution of the Growth Centres Biodiversity Offset Program

The use of biodiversity offset schemes to offset the impact of development grew out of a failed attempt in 2005 to codify a green belt in Sydney before the release of a major new urban growth plan.

A brief history of how and why a landscape-scale biodiversity offset scheme replaced proposed well thought out laws and regulations to codify a green belt in Sydney is instructive. Unfortunately, it highlights how the weaknesses in today's scheme were cemented into the program by the need to reach a compromise solution for protecting biodiversity that satisfied the interests of the powerful property developer lobbying groups.

In 2007, the University of Technology's Helen Gilbert wrote a detailed paper about the failed implementation of the green belt initiative. She was remarkably prescient about the parlous current state of our environment when she observed that a "revised more market-based approach to retaining bushland and greenspace is less likely to guarantee conservation outcomes in terms of connectivity and linkages - concepts which are well recognised as essential approaches to ecosystem integrity and biodiversity conservation."¹

The Metropolitan Strategy for North West and South West Sydney envisaged two growth sectors covering a total development of over 20,000 hectares. The goal was to provide 160,000 new houses and 180,000 new jobs over the next 25 years. The South West release area covered the council areas of Camden, Campbelltown and Liverpool and anticipated a 100,000 new dwellings.

Extensive greenbelts were planned to surround both sectors, with substantial corridors of greenspace also running through them. The green zones comprised 30% of the land area of the sectors and covered thousands of landholdings including market gardens, hobby farms and large estates. The "green overlay" was designed to preserve existing non-urban land for aesthetic, biodiversity conservation, recreation and agricultural purposes. It covered 8,400 hectares in the land release areas and a further 14,000 hectares outside the growth centres.

For over a century, greenbelts have been promoted as providing green lungs for cities, offering nature, scenery, fresh air, market gardens, orchards, recreational areas close to the cities, catchment management and the conservation of biodiversity.

The green zone concept was the result of a three-year planning process. A study was done by EcoLogical Australia with the goal of achieving regional habitat connectivity, hence the corridor included a range of landscape features and ecosystems including some cleared

¹ Private Property Rights and the Public Interest in Land Use Conflicts: The Case of Sydney's Lost Greenbelt by Helen Gilbert, University of Technology, 2007.

lands. The study found nine endangered remnant vegetation communities in each sector, with four of national environmental significance. It noted that all the vegetation communities on the Cumberland Plain have less than 30% of pre -1750 levels, with some having less than 10% remaining.²

The campaign by local developers to stop the green belt zones was one of the biggest and most effective in decades. The protests (mostly organised by the big developers on behalf of smaller landholders) focused on the cleared ‘linkage’ lands, which were apparently reported to include some factories, sewage treatments works and shooting ranges. The protesters said the maps used to designate the green zone areas were based on outdated aerial photographs rather than survey works in the field.

The protesters also argued that the value of their properties would be diminished if rezoning potential was removed despite the fact that most of the land in these areas was rural. Gilbert wrote that, “Pressure from landowners resulted in the government putting private profits before community or public values and benefits for future generations. Further, the property values in question were potential values, not existing ones.”³

The City of Cities strategy was released two months after the green belt proposal was abandoned. It released an additional 2,500 hectares for the development of 12,000 new house lots in the south west sector. This additional land release included land that had been designated as green zones outside the main development growth areas, but also included land that had been zoned parkland inside.

The subsequent Sydney Region Growth Centres 2006, followed by a conservation plan, outlined alternative approaches to protect around 2,000 hectares - now less than 20% of the area under development. The conservation plan introduced an environmental offset scheme, funded by developer contributions, to purchase bushland of significant conservation value, although the areas to be purchased would be much smaller than the original area proposed and take place over 30 years.

Some quasi green zones including an environment conservation zone and local and regional public recreation zones were retained in the new conservation plan with local councils nominated as the acquiring authority for these sites. According to Gilbert, “the councils have since complained about the lack of detail about land being set aside for housing and open space and have called for a clear definition of the boundaries of land set aside for housing, employment and open space to remove speculative pressure on rural lands.”

[USA style land management concepts](#) like biodiversity certification, an upfront approval process that exempts development applications from the requirement to assess environmental impacts, and biobanking were other innovations introduced at this time.

² Ibid

³ Ibid

Description of the Growth Centres Biodiversity Offset Program for the Sydney Region Growth Centres SEPP 2006

Heavy dependence on developer contributions for funding has meant that biodiversity offsets are staged to coincide with development and only delivered slowly over time

One of the compromise solutions for the failed attempt to establish a green belt around Sydney was the introduction of [a Biodiversity Offset Program](#) for the Sydney Region Growth Centres SEPP. This [program relies heavily on developer levies](#) (\$530 million in 2005-2006 dollars) to primarily purchase land as biodiversity offsets in order to achieve the “improve or maintain” desired conservation outcome both within and outside of the Growth Centres. As mentioned above, it was designed to offset the environmental impact caused by the designation of two new growth centres in North West and South West Sydney in 2006.

Criteria for conservation didn't adequately identify what habitat should be protected

In 2007, the state government asked for comment on the draft Growth Centres Conservation Plan (the draft plan) and a proposal to grant biodiversity certification to the Sydney Region Growth Centres SEPP 2006.

At that time, the Environment Defenders Office (EDO) was [very critical](#) of the draft plan's lack of clear objectives and targets, the adequacy of the data used to determine biodiversity values and the adequacy of the criteria used to define ‘improve or maintain biodiversity values’, particularly because it didn't identify what habitat should be protected and restored to maintain viable populations of the widest possible range of species in the landscape over the long term. It also undervalued the importance of habitat corridors to landscape connectivity.

In 2012 the federal government mandated that the Cumberland Plain be the 'first priority offset' area for the Growth Centres Biodiversity Program

In 2012, the federal government granted biodiversity certification to the Growth Centres Biodiversity Offset Program on the basis that [better outcomes for biodiversity](#) would be achieved by streamlining strategic planning decisions rather than assessing individual properties in a piecemeal fashion. But in order to gain the biodiversity certification under the EPBC Act, the state government was forced to strengthen its conservation goals.

Its 2010 *Growth Centres Strategic Assessment* guaranteed, for example, that the conservation fund would be used to secure offsets on the Cumberland Plain as a [first priority](#) so that at least 2,400 hectares of Commonwealth-listed Critically Endangered Cumberland Plain Woodland or other ‘grassy woodland’ communities can be eventually secured for protection.

The strengthened directive for where acquisitions should be made was in recognition that less than six per cent, or around 6,400 hectares, of the original [critically endangered Cumberland Plain Woodland](#) (CPW) in Western Sydney still exists.

In the first 11 years of the program, only 715 hectares of a stated goal of 2,400 hectares has been secured for conservation on the Cumberland Plain

The Program's practice of securing biodiversity offsets to coincide with land release for development has meant that in its 11 years of operation [only 715 hectares of native vegetation](#), including 369 hectares of state-listed critically endangered CPW and 324 hectares of threatened ecological communities other than Cumberland Plain Woodland, has to date been set aside for conservation.

The Growth Centres Offset Program's last annual report acknowledged that it is unlikely to deliver all of the required biodiversity offsets on the Cumberland Plain

The Program's most recent [annual report](#) acknowledges that land suitability and cost-effectiveness may impede its ability to deliver all of the required biodiversity offsets on the Cumberland Plain.

This problem highlights why the [Interim Report](#) of the EPBC Act was extremely critical of the use of biodiversity offset programs:

Offsets do not offset the impact of development, and overall there is a net loss of habitat. Proponents are permitted to clear habitat in return for protecting other areas of the same habitat from future development. It is generally not clear if the area set aside for the offset is at risk from future development.

Example 2: The Draft Cumberland Plain Conservation Plan (CPCP)

Massive urban development is being proposed in a subregion that has been previously designated as a 'first priority' biodiversity offset investment area

Four more growth centres in or near the area covered by the Sydney Regions Growth Centre SEPP have either been added or are under investigation: the Greater Macarthur Growth Area, the Western Sydney Aerotropolis, the Wilton Growth Area and the Greater Penrith and Eastern Creek Investigation Area.

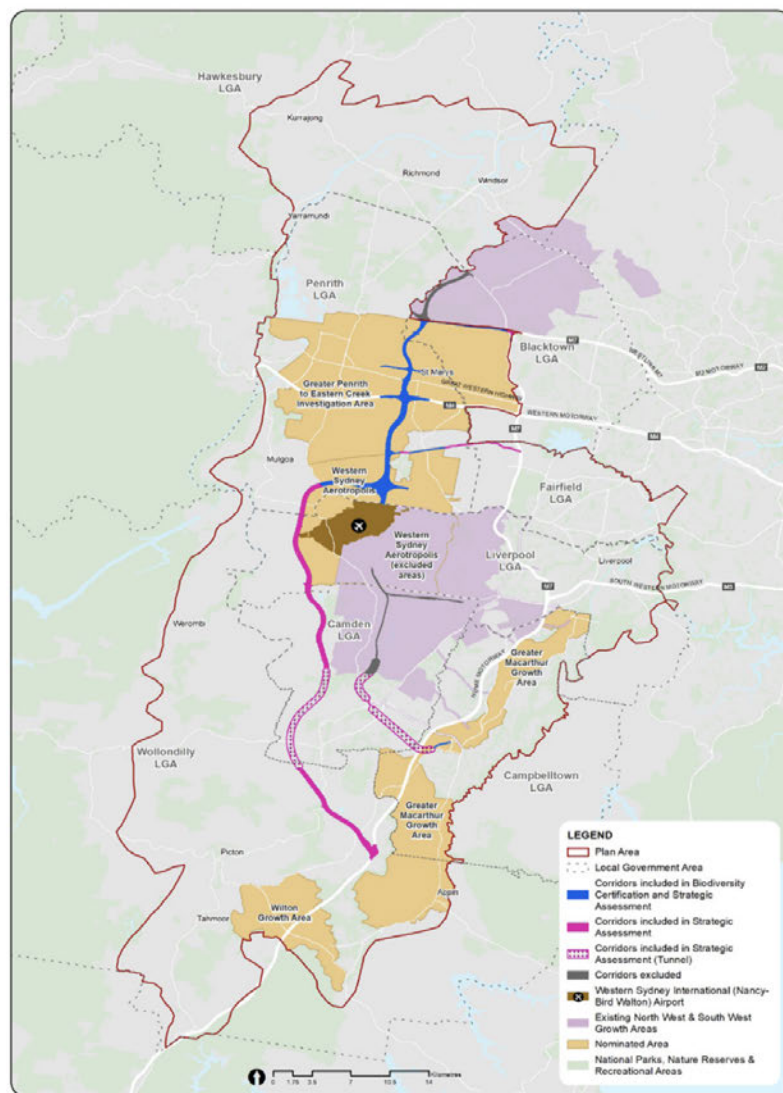


Figure 2. Draft Cumberland Plain Conservation Plan Area and scope

The [Sydney Regions Growth Centres SEPP](#) was amended in 2019 to include both the Greater Macarthur Growth Area and the Wilton Growth Area. These areas sit on the Cumberland Plain, which is home to [around 160 threatened species, including the largest koala population in Sydney](#).

The [Greater Macarthur Growth Area](#) will include 12 precincts stretching from Macarthur to Appin and is predicted to add approximately 58,000 new homes to the area by 2040. The [Wilton Growth Area](#) will add seven new precincts and approximately 60,000 new homes.

The draft CPCP indicates the release of a total of 10,014 hectares of rural land for urban redevelopment while setting aside only 5,475 hectares of native vegetation in new conservation lands.

The [draft CPCP](#) will include the likely addition of three new reserves but some of this land is already publicly held. The Office of Strategic Reserves, for example, currently owns 60% of the 1,130 hectares of land to be initially set aside for the proposed Georges River Koala Reserve.

The draft CPCP also acknowledges that the 755 hectares of land to be incorporated into the Georges River Koala Reserve will only be secured by 2040. At least 25% of the targeted 5,475 hectares of native vegetation will be delivered through the ecological restoration of threatened native vegetation. Agreements will also be entered for biodiversity stewardship on private lands.

The draft CPCP will impact 1,014.6 hectares or almost 16% of the critically endangered Cumberland Plain Woodland (CPW), potentially jeopardising federal government biodiversity certification of the Growth Centres Biodiversity Offset Program for the Sydney Regions Growth Centres SEPP.

Overall, the draft CPCP identifies impacts on:

- 1,777.8 hectares of native vegetation;
- 8 threatened ecological communities listed under the Biodiversity Conservation Act 2016 (BC Act) and 4 threatened ecological communities listed under the EPBC Act (and a fifth currently under nomination); and
- 25 flora species and 24 fauna species.

In its [submission](#) on the draft CPCP, the Environmental Defender's Office (EDO) identified that the Conservation Plan will likely face the same problems experienced by the Growth Centres Biodiversity Offset Program in securing enough CPW to offset the impact from the land release program:

The Conservation Plan proposes securing an offset target of 3,170 ha of CPW (Commitment 8.1) in conservation lands within strategic conservation areas, but we are concerned that this commitment will be difficult to meet, particularly because:

- *Appropriate offset sites have not been identified upfront. The Confluence Reserve Investigation Area is considered unlikely to benefit CPW;*
- *Limited funding for securing offsets has been secured; and*
- *Securing offsets for CPW is known to be difficult*
- *the Growth Centres Biodiversity Offset Program, which was developed as part of the 2010 Sydney Growth Centres Strategic Assessment, was intended to secure offsets for CPW, but publicly available reporting shows that cost and suitability constraints may impede the ability to secure high-value biodiversity offsets on the Cumberland Plain.*

A land release plan that further impacts the critically endangered Cumberland Plain Woodland makes no sense, especially because the cost of securing appropriate biodiversity offsets is prohibitive

According to a recent major environmental investigation by the Guardian, '[Development should stop': serious flaws in offsets plan for new western Sydney airport](#)', when the former Environment Minister Josh Frydenberg was considering a biodiversity offset program in 2016 for Sydney's second airport, he noted that the "Cumberland Plain Woodland was now so scarce and fragmented in its native western Sydney that it would be challenging to secure the volume of direct offsets required under the EPBC Act to compensate for the massive new development." He also observed that "There is also considerable competition for available offsets containing EPBC-listed Cumberland Plain woodlands from other developments in western Sydney."

Back in 2015, Campbelltown Council took advantage of the [opportunity](#) to secure an additional funding stream by registering the existing Noorumba Reserve as a biobank site. Subsequently, Lendlease was controversially [allowed](#) to 'enhance' this biobank rather than set aside more land on its Mt Gilead property at Campbelltown for koala habitat.

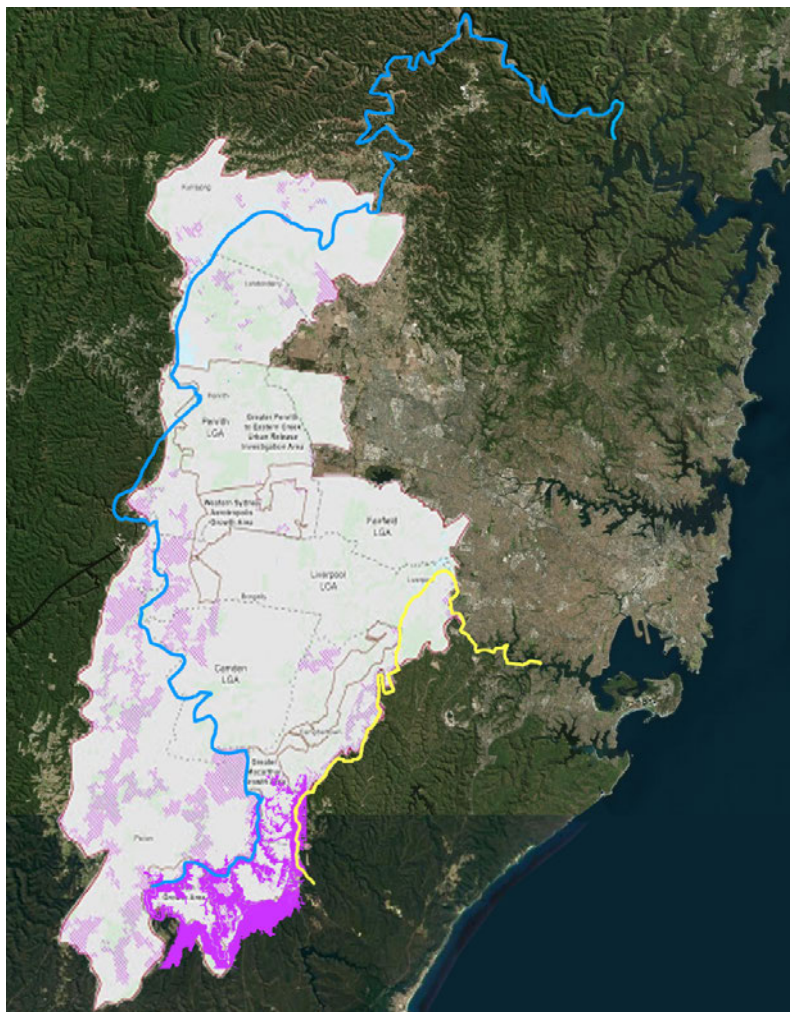
The EDO has been extremely critical of the use of biobanking and cash contributions to the Biodiversity Conservation Trust as alternatives for securing "like for like" biodiversity offsets. Rachel Walmsley, Policy & Law Reform Director EDO NSW, [coined](#) the phrase "the political endorsement of extinction" to describe the federal government's accreditation of the NSW Government's biodiversity offsets policy for major projects "despite concerns that it failed to meet national environmental standards," which for protected matters, like threatened species, only allow for 'like for like' biodiversity offsets.

The draft CPCP does not include a firm commitment of the amount of land to be protected or acquired over time

The draft CPCP says "it expects that around 11,000 hectares, or approximately double the Plan's offset commitment of 5,475 hectares of impacted native vegetation, will be protected within new conservation lands." Through a peer-review process, a "strategic conservation area" of 28,300 hectares, which includes 18,300 hectares of native vegetation, has been identified. It apparently "represents the areas in the Cumberland subregion that are considered most likely to be viable in the long-term and to maximise ecological function and connectivity across the landscape." But the draft CPCP does not indicate whether any steps will be taken to protect the integrity of the strategic conservation area before the additional land can be either acquired or appropriately protected.

The draft CPCP fails to set aside enough land to properly protect the koala population

The proposed Georges River Koala Reserve will eventually set aside 1,885 hectares to protect the koalas' important north-south primary habitat corridor and it commits to eventually protecting an additional 610 hectares of important koala habitat. But this target falls far short of securing all of the primary, secondary and tertiary koala habitat corridors, which were estimated to be around 8,293.46 hectares in DPIE's 2018 report, [*Conserving Koalas in the Wollondilly and Campbelltown Local Government Areas*](#).



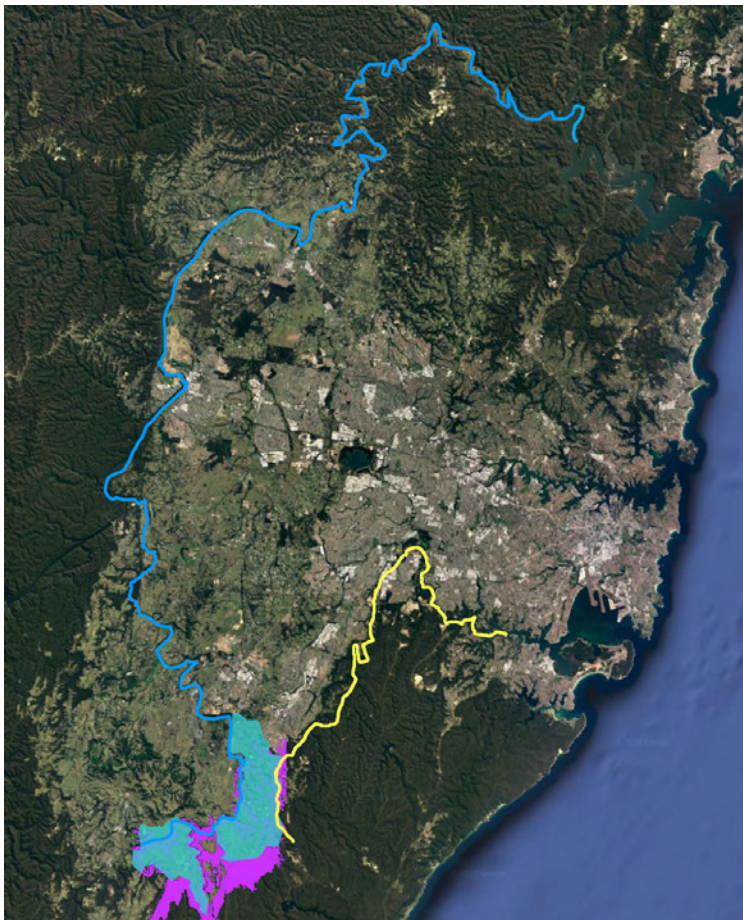
Note: The Yellow line is the Georges River and the Blue line is the Nepean River. The dark Purple area was mapped by the former Office of the Environment and Heritage to show koala habitat and the important east-west linkages that allow the koalas to move with relative ease between the two rivers. (Source: Total Environment Centre)

The draft CPCP does not accept the Chief Scientist's recommendation to secure all of the east-west habitat corridors for the koalas.

The draft CPCP acknowledges "east-west connectivity between the Georges and Nepean rivers is important for the resilience of the Southern Sydney koala population," but it discounts the recommendations made in the Chief Scientist's Campbelltown

Koala Report to protect the koala habitat of the six east-west corridors between the Georges and Nepean Rivers.

Curiously, the draft CPCP cites unspecified "scientific advice from the department and the research community...that the existing six east-west corridors in the Greater Macarthur Growth Area are too fragmented and not wide enough to support koalas over the long term." Only the suboptimal Ousedale Creek to Appin North east-west corridor, which is very fragmented especially near Appin Road, will be protected in the proposed conservation plan.



Note: The Aqua overlay on the dark Purple koala habitat (highlighted in the previous map) is rural land that has been reclassified as 'urban capable' in the Plan. This map highlights just how much koala habitat will be lost if the urban development proceeds. (Source: Total Environment Centre)

The draft CPCP has not adopted a holistic planning approach to protecting the South West Sydney koalas

The draft CPCP doesn't discuss the importance of protecting the east-west koala corridors across the Lendlease owned Mt Gilead property even though the Chief Scientist's Campbelltown Koala Report highlights "the importance of a holistic planning approach," arguing that "by their very nature, the habitat corridors within the two study areas cross multiple tenures and landscapes, connect internally and with each other," and that "koalas, in using these corridors, do not recognise lines on maps."

With respect to the benefit of maintaining east-west connectivity between the Georges River and Nepean River, the Chief Scientist's Campbelltown Koala Report underscores its important role in ensuring the long-term survival of the area's koalas:

The habitat in this region contains high quality feed trees due to the sandstone shale transition forest. The Campbelltown koala population is expanding and therefore it is essential that this habitat supports the movement of koalas such that dispersing koalas can move through the landscape, can breed to ensure genetic diversity, and can access refugia in times of stress, drought or other threats.

Offsetting mechanisms under the Biodiversity Conservation Act 2016 are at odds with the new Koala SEPP

The [Biodiversity Offsets Scheme](#) (BOS) doesn't require offsetting to be targeted at maintaining or enhancing such habitat in the local area.

In contrast, the new Koala SEPP 2021 aims to protect the totality of the site based on its vegetation characteristics. Further, the biodiversity offset standard of [no net loss of biodiversity](#) is considered to relate to a whole-of-region view and doesn't adequately consider biodiversity losses and gains on a localised scale including impacts to local habitat and movement corridors.

The mapping of habitat on the state's Biodiversity Values Map is also one of the triggers for determining whether the BOS applies to a development proposal, but the NSW Government [has yet to call](#) on local councils to nominate land to be included in the Biodiversity Values Map.

Question marks remain about whether the CPCP can be successfully implemented and enforced

The strategic biodiversity certification framework for the CPCP gives upfront approval to impacts on biodiversity but delays certainty about the nature of the offsets and when they will be implemented in order to mitigate the impacts.

Two other reserves, the Gulguer and the Confluence, for example, are still under investigation for feasibility. Sufficient clarity is also lacking about the representation of Cumberland Plain Woodland or other 'grassy woodland communities in the 4,795 hectares of 'avoided land' to be zoned E2 (environmental conservation).

While not all development or impacts will occur immediately on commencement of the Plan, unless conservation measures are implemented in advance, the CPCP will result in significant impacts on biodiversity without guaranteeing amelioration of those impacts by sufficient

biodiversity offsets, irrespective of whether the proposed conservation measures are sufficient to mitigate the potential impacts in the first place.

Conclusion

The analysis of the design and delivery drawbacks of both the Growth Centres Biodiversity Offsets Program and the draft CPCP highlight why landscape-scale biodiversity offset schemes can't be relied upon to deliver 'no net loss' biodiversity outcomes.

Their lack of effectiveness is further compromised by biodiversity certification, which doesn't allow for environmental impact assessments on individual properties designated 'urban capable' to accommodate for unforeseen impacts like bushfires or positive developments like the territorial expansion of the koalas. As the Chief Scientist's Campbelltown Koala Report noted, the South West Sydney koala population is still [expanding](#) with sightings being recorded in new and unexpected areas.

Biodiversity certification of landscape-scale conservation plans should not exempt developers from complying with policies and regulations designed to strengthen protections for threatened species and their habitat. Developers of land reclassified as "urban capable" in the CPCP, for example, should be required to show that their DAs comply with the Koala SEPP 2021 and with their local council's Koala Plans of Management.

The Growth Centres Biodiversity Offset Program needs to be fully delivered before the CPCP is approved and implemented. The decision to release rural land for development on the 'first priority' biodiversity offset area of the Cumberland Plain is unacceptable and will likely mean that Growth Centres Biodiversity Offset Program will never meet its Commonwealth agreed biodiversity certification obligations.

The draft CPCP must be revised to incorporate all of the recommendations made by the Chief Scientist's Koala Report to protect koala habitat corridors. The stakes of not doing so are simply too high. NSW cannot afford to lose its last healthy koala population, especially if the Government wants to meet its [stated goal](#) of doubling the koala population by 2050.

The UNSW's Built Environment's faculty member Peter Williams argued in his 2009 paper, [*Integrating biodiversity in Australian cities – managing urban growth and biodiversity in Sydney*](#), that an 'improve or maintain' outcome for biodiversity values in the Sydney Basin "is difficult – if not impossible – to achieve given the high conservation value of the remaining biodiversity and ecological communities." This prescient observation is even more true today and cannot be ignored!

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