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Draft Updated Cumberland Plain Conservation Plan Mitigation Measures Guideline

March 2025



Acknowledgement of Country

Department of Planning, Housing & Infrastructure would like to acknowledge the Dharawal, Dharug and Gundungurra peoples, who care for the Cumberland Plain. Others, such as Darkinjung, Wiradjuri, Guringgai and Yuin maintain trade or other obligatory care relationships with the area. We extend that respect to the Deerubbin, Gandangara and Tharawal Local Aboriginal Land Councils who maintain responsibilities towards Country, community, and culture.

We acknowledge the many thousands of First Nations peoples in Western Sydney who call the Cumberland Plain home. While their lineage may also connect them to other Countries, we acknowledge their deep connection to this Country. We extend that respect to all First Nations peoples who have a relationship with the Cumberland Plains.

The development of the Cumberland Plain Conservation Plan acknowledges the continuous First Nations connection to the land that makes up NSW.

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Introduction

The Cumberland Plain Conservation Plan Mitigation Measures Guideline (the guideline) supports strategic conservation planning outcomes and the implementation of the Cumberland Plain Conservation Plan (CPCP) outcomes.

The CPCP has been developed to protect western Sydney's biodiversity while supporting the delivery of housing, jobs and infrastructure. It meets requirements for strategic biodiversity certification under the *Biodiversity Conservation Act 2016* (NSW) (BC Act) and strategic assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). We will refer to these from now on as 'the CPCP biodiversity approvals'.

The guideline sets out requirements that development or activities on certain land must address to ensure consistency with the CPCP biodiversity approvals. The mitigation requirements will mitigate indirect¹ and prescribed² impacts of development or activities on certified urban capable land in accordance with the CPCP biodiversity approvals. It also aims to mitigate any impacts that development on certified urban capable land may have on adjacent avoided land.

Key planning mechanisms

Development or activity within the CPCP area must be consistent with the CPCP biodiversity approvals. The guideline together with a suite of documents form the planning mechanisms designed to ensure development or activity in the nominated areas is consistent with the CPCP biodiversity approvals. The suite of documents is:

1. *Chapter 13 (Strategic Conservation Planning) of the State Environmental Planning Policy (Biodiversity and Conservation) 2021* (B&C SEPP).
2. Environmental Planning and Assessment Regulation 2021.
3. Ministerial Direction 3.6 for Strategic Conservation Planning.
4. Cumberland Plain Conservation Plan Guidelines for Infrastructure Development.

Approvals may still be required under other legislation, including the *Environmental Planning and Assessment Act 1979* (EP&A Act), *Fisheries Management Act 1994* and the *Water*

¹ Indirect impacts include downstream, downwind, upstream and facilitated impacts e.g. fertilisers washed into river systems, extraction of raw materials and impacts on water flow due to construction of a dam.

² A prescribed impact, in the Biodiversity Offset Scheme, is an impact to a particular factor affecting biodiversity which must be considered. These are: impacts or potential impacts to habitat features (such as caves and cliffs, rocks, man-made structures and non-native vegetation) as well as impacts on habitat connectivity, threatened species movement, water bodies and water-related processes that sustain threatened species.

Management Act 2000. Development will still be required to comply with relevant state and local environmental planning instruments. Consent authorities will be able to advise whether other planning or environmental approvals may be required.

Aim of this guideline

This guideline aims to:

1. ensure consistency with the CPCP biodiversity approvals
2. meet the CPCP environmental outcomes
3. guide proponents, planning authorities, consultants, and the community to implement the CPCP commitments and actions
4. set out the requirements to mitigate the indirect and prescribed biodiversity impacts from development within the CPCP area.

Linkages with CPCP commitments

Table 1 shows how the preparation and implementation of the guideline are meeting the CPCP commitments.

Table 1: CPCP commitments satisfied by the guideline

CPCP commitment	Commitment Number
Mitigate indirect and prescribed impacts from urban and industrial development, infrastructure and intensive plant agriculture on threatened ecological communities, species and their habitat.	5
Mitigate indirect and prescribed impacts from urban, industrial, and infrastructure development on the Southern Sydney koala population to best-practice standards and in line with advice from the NSW Chief Scientist and Engineer, and in accordance with Appendix E of the CPCP.	7
Protect koala corridors in the Cumberland subregion, including those along the Georges River, Nepean River, Cataract River and Ousedale Creek.	12
Minimise impacts from development on biodiversity values in the strategic conservation area.	14
Manage priority pest species in strategic locations in the Cumberland subregion to reduce threats to protected land.	16
Manage fire in strategic locations in the Cumberland subregion to support the maintenance of biodiversity values on conservation land.	17

CPCP commitment	Commitment Number
Support new or existing programs to control key diseases affecting threatened species and ecological communities in the Cumberland subregion.	18

Context

Part 1 of the guideline applies to strategic planning occurring on certified urban capable land within the nominated areas. Nominated areas in Western Sydney have been identified for future growth on certified urban capable land, which has been provided approval through the CPCP under the *Biodiversity Conservation Act 2016* (NSW) and *Environment Protection and Biodiversity Conservation Act 1999* (Cth). Nominated areas include the: Greater Macarthur Growth Area, Greater Penrith to Eastern Creek Investigation Area, Western Sydney Aerotropolis and Wilton Growth Area and are shown in **Figure 1**.

Part 2 and Part 3 of the guideline apply to development under Part 4 of the EP&A Act carried out on certified urban capable land. These parts of the guideline also apply to development on land identified as certified major transport corridors under the CPCP.

Note that Part 2 – Koalas only applies to the Greater Macarthur Growth Area and the Wilton Growth Area.

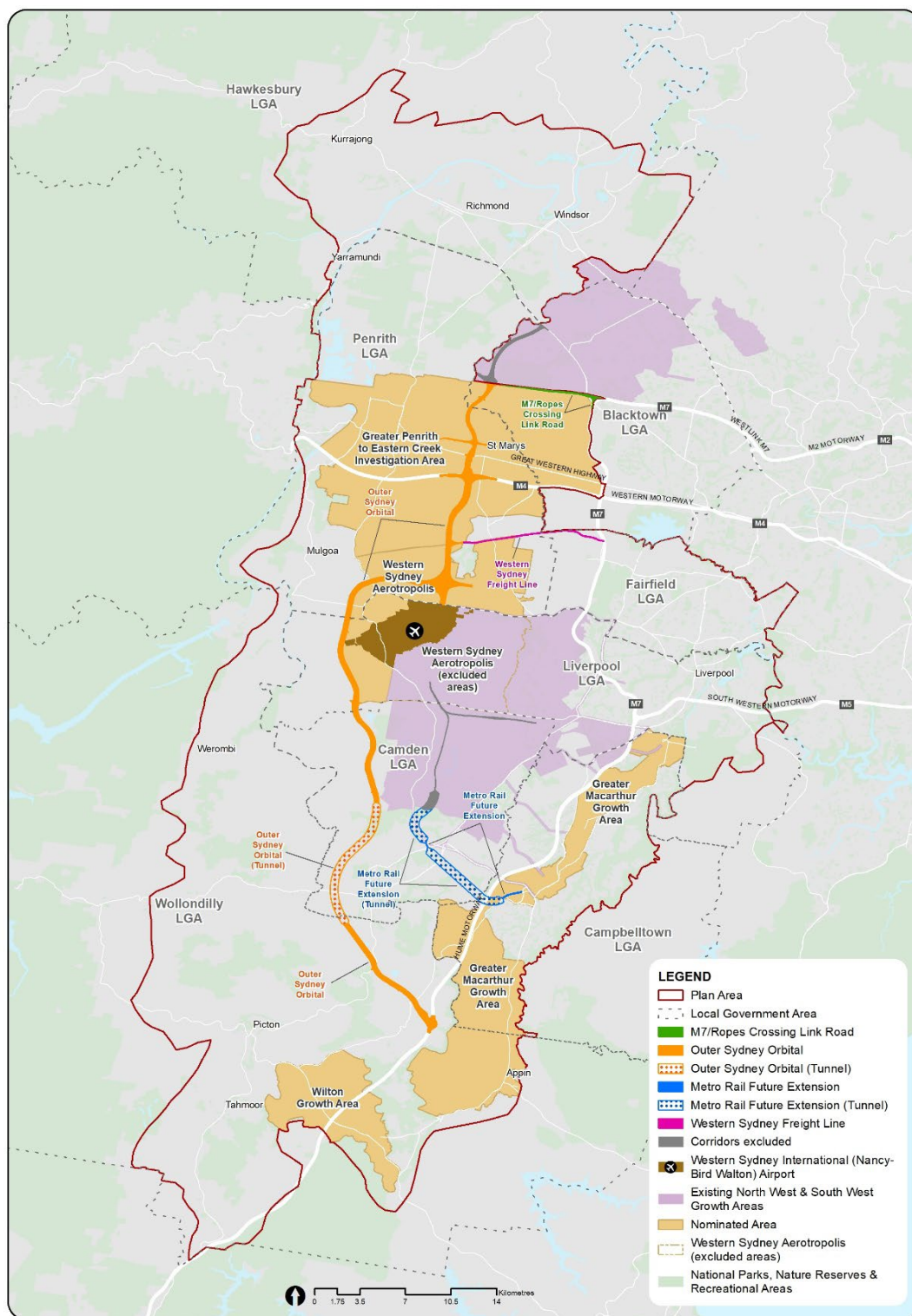


Figure 1. The nominated areas within the CPCP area

Application of measures

Part 2 and Part 3 of the guideline detail the mitigation measures that are likely to be required for different developments according to their scale of indirect and prescribed biodiversity impacts, including impacts on protected koala habitat.

The relevant consent authority will be able to advise on which controls apply to individual development applications. The scale of indirect and prescribed biodiversity impacts is outlined in **Table 2**.

Table 2: Scale of indirect and prescribed biodiversity impacts

Biodiversity Impact	No to low impact	Moderate impact	Major impact
	Minor prescribed impacts or minor indirect impacts.	Moderate prescribed impacts or moderate indirect impacts.	Major prescribed impacts or major indirect impacts.

Prescribed impacts are impacts on biodiversity values that do not comprise direct clearing of native vegetation and are listed in Clause 6.1 of the *Biodiversity Conservation Regulation* (NSW).

Indirect impacts are those not directly associated with clearing for development but arise from vegetation clearing and changes in land-use patterns. Further information about the prescribed and indirect impacts associated with the CPCP can be found in Chapters 15 and 24 of the Cumberland Plain Assessment Report 2021.

Meaning of “protected koala habitat”

For the purposes of the CPCP Mitigation Measures Guideline, *protected koala habitat* is land that is identified in the **Protected Koala Habitat and Restoration** map as either ‘**Protected Koala Habitat**’ or ‘**Potential Restoration for Protected Koala Habitat**’. This map is available on the [CPCP Spatial Viewer](#).

Inclusion of the Potential Restoration for Protected Koala Habitat area reflects the need to mitigate impacts on the future habitat values of this land.

Part 1 – Strategic Planning

Application of this part

This part applies to strategic planning occurring on certified urban capable land within the nominated areas. For the purposes of this part, strategic planning includes, but is not limited to making or amending:

- State Environmental Planning Policies (SEPPs)
- Local Environmental Plans (LEPs) and rezonings
- Development Control Plans (DCPs)
- Indicative layout plans
- Structure plans
- Master plans
- Precinct plans
- Place strategies.

While the guideline applies to certified urban capable land, consideration should be given to opportunities to further enhance environment and planning outcomes on adjacent areas of high biodiversity value including avoided land. For example, strategic planning with an indicative master plan should provide buffers for avoided land by locating sports fields, public parks, walking and bike paths, and APZs on certified land in areas adjacent to avoided land. Any existing vegetation or other biodiversity values within these buffers could be incorporated into the final design. Location-specific strategic planning processes provide an opportunity to integrate the objectives of the CPCP into the urban design of new neighbourhoods in ways that can enhance biodiversity and open space. Benefits of this approach include retaining local character, improving liveable spaces, contributing to open space networks, and complementing ‘biodiversity in place’ urban design.

Objectives of this Part

- Consider opportunities for native vegetation in certified urban capable areas to support liveable and sustainable communities, co-locating compatible land uses and supporting urban heat management, tree cover, blue green grid outcomes and water sensitive urban design.
- Maintain the integrity of flora and fauna protected under the CPCP.

- Ensure measures to mitigate the indirect and prescribed biodiversity impacts from development are considered early in the development process.

Strategic planning considerations

Table 3 outlines the planning guidance that may be considered through any strategic planning processes (including planning proposals and master planning) that apply to certified urban capable land within the CPCP nominated areas. A graphic representation of these considerations is provided in **Figure 2**.

Table 3 – Strategic planning considerations for certified urban capable land

#	Issue	Consideration
1	Co-locating	Consider co-locating planned open space with existing native vegetation on certified urban capable land through strategic planning documents and layouts. This provides significant benefits such as reducing urban heat effects, providing diverse recreation and amenity opportunities and supporting more liveable communities.
2	Tree retention	<p>Retain trees 50cm Diameter at Breast Height (DBH) or greater with supporting vegetation that either:</p> <ul style="list-style-type: none"> • provide significant landscape values and amenity, • are part of a threatened ecological community, or • provide habitat including hollow bearing trees, dead standing trees, recruitment trees, roost trees, nest trees, or trees with any other habitat features. <p>Retained trees on certified urban capable land must not present an imminent risk to human life or property.</p>
3	Tree retention	Where trees are retained on certified urban capable land consider retaining adjacent supporting ecosystem features including trees of various sizes, native shrubs (mid story) and ground covers.

#	Issue	Consideration
4	Tree retention	<p>Planning proposals may wish to consider potential locations for the retention of existing native vegetation. To retain existing trees strategic planning designs could:</p> <ul style="list-style-type: none"> • widen road reserves and non-standard cross fall verges, • consider the future streetscape and amenity of the area through strategic landscape design and street tree master planning • create larger lots with designated planting spaces within front and rear setbacks, • locate open space and public uses in areas where there are existing trees, native vegetation or other biodiversity values.
5	Zoning & Permissible uses	Proposals to rezone land must be consistent with Ministerial Direction (3.6 Strategic Conservation Planning).
6	Open Space and riparian corridors	Consider designing open space to minimise earthworks or other disturbance to existing soil profiles.
7	Open Space and riparian corridors	Future landscaping of open spaces should use species which are endemic to the local area or climate resilient native species.
8	Open Space and riparian corridors	Infrastructure including drainage works, basins, flood mitigation or other infrastructure works should be located within certified urban capable land and should be consistent with Guidelines for Infrastructure Development.
9	Open Space and riparian corridors	Planting of koala use tree species (as defined in the Design Guidelines for Koala-exclusion Fencing) should be avoided to discourage koala movement into open space recreation areas.
10	Road design and lot layout	Perimeter roads and co-located open space have been considered to protect avoided land from development.
11	Asset Protection Zones (APZ)	APZs must be wholly contained within certified urban capable land.
12	Species consideration and buffers	All targeted fauna species and nesting habitat are to have the buffers stipulated in Appendix E of the CPCP applied and incorporated into the site design.
13	Koalas – Habitat protection & buffers	On certified urban capable land, consideration should be given to appropriate design that allows for buffers and low impact uses adjacent to protected koala habitat.

#	Issue	Consideration
14	Koalas – Fencing	Koala exclusion fencing must be incorporated into the design so that, if required, it can be implemented in accordance with Part 2 of the mitigation measures guideline and the Design Guidelines for Koala-exclusion Fencing.
15	Impacts to adjacent avoided land	Where possible strategic and master plan design minimises impacts to adjacent avoided land, and protected koala habitat, by: <ul style="list-style-type: none"> • minimising light and noise pollution • avoiding habitat fragmentation • minimising edge effects • enhancing connectivity • managing and preventing the spread of weeds and the risk of illegal dumping • mitigating dangers to fauna from urban development.
16	Caring for Country	Consideration should be given to the CPCP Caring for Country – Aboriginal Outcomes Strategy 2023-2033 and the Government Architect's Connecting with Country Framework.
17	Caring for Country	Design should demonstrate consideration of Aboriginal culture including significant sites, traditional movement corridors, significant view lines, landscape, flora and fauna, waterways and culturally significant sites, scar trees, middens, tree groves, rock carvings, paintings, significant land markers, travel paths or song lines.
18	Caring for Country	Traditional Custodians should be consulted to identify and design plans that emphasise culturally significant places in a way that celebrates and supports ongoing cultural connection and practice.
19	Complementary values	Strategic planning documents and layouts should demonstrate complementary values that enhance the CPCP and provide: <ul style="list-style-type: none"> • protection of waterway health and waterway management • contribution to urban canopy cover • mitigation of the heat island effect • delivery of a blue green grid • sustainability outcomes.

MMG Specific requirements

In addition to the above, the following mitigation measures from Parts 2 and 3 of this guideline should also be considered at the strategic planning stage:

- **Table 5** - Mitigation measures 9 – 12
- **Table 6** - All mitigation measures
- **Table 9** - All mitigation measures.

Strategic planning processes may wish to consider whether these measures can be adequately addressed when it comes to the future development of the site.

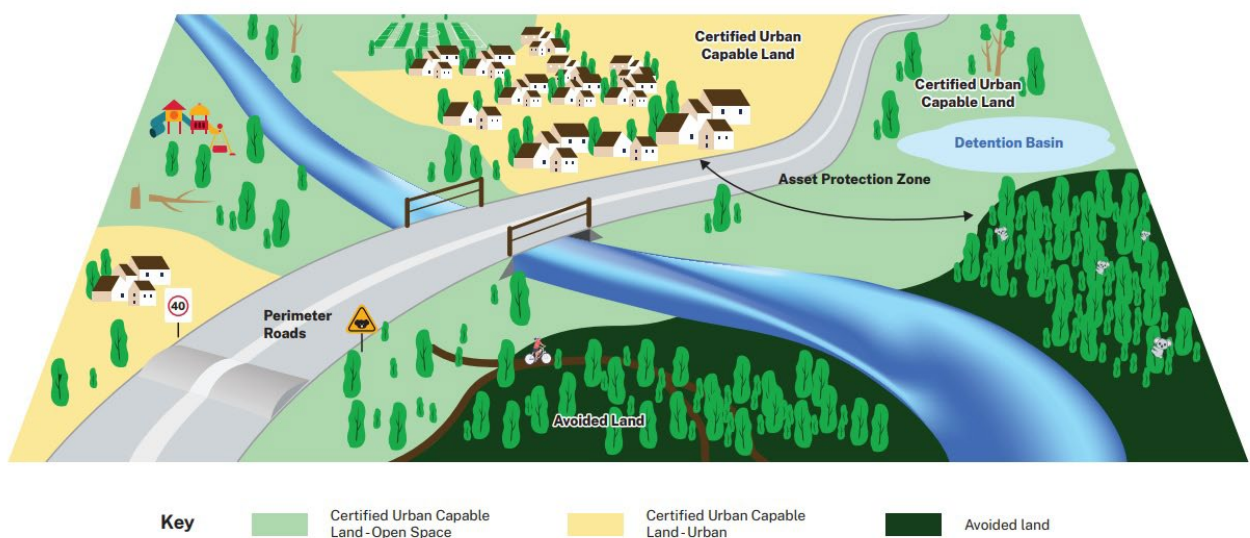


Figure 2. Strategic planning considerations within nominated areas

Part 2 – Koalas

This Part applies to development applications under Part 4 of the *Environmental Planning & Assessment Act 1979* on **certified urban capable land or land in a certified major transport corridor in the Wilton Growth Area or the Greater Macarthur Growth Area**.

As set out in Part 1, Precinct Design measures 9-12 in Table 5 and all measures in Table 6 must also be considered in strategic planning.

Environmental outcome

The effective implementation of Part 2 of the MMG will ensure that the condition of protected koala habitat is improved, connectivity between koala sub-populations is maintained, threats to koalas are managed and the koala population in south-west Sydney persists. The CPCP commitment that is being met by providing mitigation measures for koalas is outlined in **Table 4**.

Table 4: CPCP commitment for threats to threatened ecological communities for koalas

Objectives - Threats to threatened ecological communities	CPCP Commitment
Mitigate indirect and prescribed impacts from urban, industrial, and infrastructure development on the Southern Sydney koala population to best-practice standards and in line with advice from the NSW Chief Scientist and Engineer, and in accordance with Appendix E of the CPCP	Commitment 7

For all development on certified urban capable land that is identified in the CPCP viewer adjoining protected koala habitat, the controls outlined in **Table 5** apply.

Table 5: Koala mitigation measures — all development

	Requirement	Controls	No to low impact	Moderate impact	Major impact
1	Onsite ecologist	A suitably qualified ecologist must undertake pre-clearance koala surveys and be present during all vegetation clearing works. The ecologist is to maintain oversight of and responsibility for the activities and koala translocation, in accordance with the approved translocation plan (see mitigation measure 2) and tree-felling protocol (see mitigation measure 3).		✓	✓

	Requirement	Controls	No to low impact	Moderate impact	Major impact
2	Koala Translocation	Prior to work commencing a pre-clearance koala survey is to be undertaken. If koalas are found, a translocation plan is to be prepared by an ecologist, which may require approval by NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW). The plan must be implemented to relocate koalas prior to the clearing of any native vegetation. Koalas should be restricted from accessing any vegetation to be cleared. Information on translocation and licences are outlined in the DCCEEW Translocation Operational Policy 2019.		✓	✓
3	Pre-construction koala controls	Implement a tree-felling and clearing protocol to avoid impacts to koalas that are in trees or other habitat to be cleared.		✓	✓
4	During construction koala controls	Enforce vehicle wash-down points for machinery, equipment and tyres before entering and leaving the construction site to control the spread of vegetation pathogens known to affect trees from which koalas feed.	✓	✓	✓
5	Koala exclusion fencing	Koala fencing must meet the requirements of the Design Guidelines for Koala-exclusion Fencing. Any inconsistency with the guideline requirements must be justified having regard to the overarching koala exclusion principles in the guidelines.	✓	✓	✓
6	Pre-construction temporary fencing	Where permanent koala exclusion fencing is not installed prior to construction, temporary fencing (consistent with the requirements in the Design Guidelines for Koala-exclusion Fencing) should be installed to prevent koalas from accessing the site during construction.	✓	✓	✓
7	Public Dog containment fencing	Do not locate public dog recreation areas near protected koala habitat areas. Provide secure dog containment fencing for public dog recreation areas. Provide site specific signage that koalas are in the area and dogs must be on leash when not in the public dog recreation areas.	✓	✓	✓
8	Private Dog containment fencing	Design residential lots with dog containment fencing in accordance with council requirements.	✓	✓	✓

	Requirement	Controls	No to low impact	Moderate impact	Major impact
9	Precinct Design	Design subdivision layout, including perimeter roads and asset protection zones, to reduce impacts on, and protect areas of, adjacent protected koala habitat.	✓	✓	✓
10	Precinct Design	Signpost areas adjoining protected koala habitat to identify that koalas are in the area and the associated penalties for non-compliance.	✓	✓	✓
11	Precinct Design	Do not plant koala use trees (as defined in the Design Guidelines for Koala-exclusion Fencing) in open space, recreation areas and urban streets.	✓	✓	✓
12	Precinct Design	Designs must consider and minimise impacts to adjacent protected koala habitat, including: <ul style="list-style-type: none"> • light and noise pollution • the spread of weeds • the risk of illegal dumping, and • other edge effects. 	✓	✓	✓

For any development that includes the provision of roads, the requirements outlined in **Table 6** need to be considered.

Table 6: Koala mitigation measures — all development with roads

	Requirement	Controls	Low impact	Moderate impact	Major impact
11	Koala road safety	The following measures are to be implemented on roads within 150m of protected koala habitat:			
11A	Development operation	Manage roadside vegetation adjacent to protected koala habitat areas to minimise height of ground cover and increase visibility of any roadside fauna. Mow turfed areas, mechanically trim low ground covers.	✓	✓	✓
11B	Koala road safety	Implement 40 km/hr speed limit restrictions on local roads.	✓	✓	✓
11C	Koala road safety	Install traffic-calming devices such as speed humps and audible surfacing to slow traffic.	✓	✓	✓

	Requirement	Controls	Low impact	Moderate impact	Major impact
11D	Koala road safety	Use road markings and signage (active and static) to alert residents to the potential for koalas in the area.	✓	✓	✓
11E	Koala road safety	Install koala information signposts on roadsides in accordance with Austroads, Roads and Maritime Services (RMS) technical guidelines, council guidelines and relevant Australian Standards.	✓	✓	✓
11F	Koala road safety	Install koala-friendly crossing structures such as underpasses, 'furniture', fauna bridges and overpasses where the road corridor restricts movement of koalas between areas of protected koala habitat.	✓	✓	✓
11G	Koala road safety	Primary access roads into development areas should not be located adjacent to unfenced protected koala habitat or additional buffers.	✓	✓	✓

Part 3 — Threatened ecological communities and species

This section applies to development applications under Part 4 of the *Environmental Planning & Assessment Act 1979*.

As set out in Part 1, the measure for site design in Table 9 must also be considered in strategic planning.

Environmental outcome

The effective implementation of Part 3 of the MMG ensures that areas of high biodiversity value in the nominated areas are protected and threats to species and ecological communities from increasing urbanisation are managed. The CPCP commitments being met by the mitigation measures for threats to threatened ecological communities are outlined in **Table 7**.

Table 7: CPCP Commitment for Threats to threatened ecological communities

Objectives - Threats to threatened ecological communities	CPCP Commitment
Mitigate indirect and prescribed impacts from urban and industrial development, infrastructure and intensive plant agriculture on threatened ecological communities, species and their habitat.	Commitment 5
Mitigate indirect and prescribed impacts from urban, industrial, and infrastructure development on the Southern Sydney koala population to best-practice standards and in line with advice from the NSW Chief Scientist and Engineer, and in accordance with Appendix E of the CPCP	Commitment 7
Manage priority pest species in strategic locations in the Cumberland subregion to reduce threats to protected land	Commitment 16

For all development on certified urban capable land that includes or adjoins native vegetation, the controls outlined in **Table 8** apply.

Table 8: Mitigation measures for Threatened Ecological Communities — all development

	Requirement	Controls	Low impact	Moderate impact	Major impact
12	Site design	Erect temporary protective fencing around retained biodiversity onsite to be protected, or biodiversity immediately adjoining the site, including avoided land, before construction begins. Consider the need for sediment and erosion measures in association with this fencing.		✓	✓
13	Fauna translocation	Prior to work commencing a pre-clearance native fauna survey is to be undertaken. If any arboreal mammals, roosting and hollow-using birds, bats and reptiles are found a translocation plan is to be prepared by an ecologist, which may require approval by NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW). The plan must be implemented to relocate animals prior to the clearing of any native vegetation. Animals should be restricted from accessing any vegetation to be cleared. Information on translocation and licences are outlined in the DCCEEW Translocation Operational Policy 2019.		✓	✓
14	Weed mitigation	Implement mitigation measures to manage weeds during construction and operation to protect adjacent flora populations, including retained vegetation/biodiversity and avoided land. Best practice guidelines should be used.	✓	✓	✓
15	Pest control	A qualified expert must prepare a pest control strategy to be carried out during construction. This must be done in accordance with best practice for chemical use to reduce the risk of secondary poisoning (from poison such as Pindone or second-generation rodenticides).		✓	✓

For any development that includes the provision of roads the controls outlined in **Table 9** apply.

Table 9: Mitigation measures for Threatened Ecological Communities — all development with roads

	Requirement	Controls	Low impact	Moderate impact	Major impact
16	Site design	<p>When designing roads adjacent to known populations of threatened species (such as Cumberland Plain Land Snail) which may isolate patches of habitat, consider:</p> <ul style="list-style-type: none"> • using bridges rather than culverts. • minimising channelisation of waterways. • installing habitat features to allow migration and movement to occur. <p>Where culverts are necessary to the road structure, ensure dry passage is provided for fauna migration i.e. ensuring enough bank or terrestrial habitat for fauna to pass under a road.</p> <p>Consider installation of bat boxes or roosting structures under bridges or culverts.</p>	✓	✓	✓

The CPCP commitments that are being met by providing mitigation measures for Threats to threatened species and habitat conditions is outlined in **Table 10**.

Table 10: CPCP commitment for threats to threatened ecological communities

Objective - Threats to threatened species and habitat condition	CPCP Commitment
Mitigate indirect and prescribed impacts from urban and industrial development, infrastructure and intensive plant agriculture on threatened ecological communities, species and their habitat.	Commitment 5
Manage priority pest species in strategic locations in the Cumberland subregion to reduce threats to protected land	Commitment 16
Manage fire in strategic locations in the Cumberland subregion to support the maintenance of biodiversity values on conservation land.	Commitment 17

Objective - Threats to threatened species and habitat condition	CPCP Commitment
Support new or existing programs to control key diseases affecting threatened species and ecological communities in the Cumberland subregion.	Commitment 18

For all development on certified urban capable land that includes or adjoins native vegetation, the controls in **Table 11** apply.

Table 11: Mitigation measures for habitat — all development

	Requirement	Controls	Low impact	Moderate impact	Major impact
17	Domestic Pet Containment	Contain domestic cats and dogs and other animals within certified urban capable land, consistent with relevant council guidelines. Owners and occupiers are to consider enclosed front fencing and are to follow any signage regarding pets on leashes and exclusion from conservation areas.	✓	✓	✓
18	Habitat Protection	Retain trees 50cm Diameter at Breast Height (DBH) or greater with supporting vegetation that: <ul style="list-style-type: none"> ○ provide significant landscape values and amenity, ○ are part of a threatened ecological community, ○ provide habitat including hollow bearing trees, dead standing trees, recruitment trees, roost trees, nest trees, or trees with any other habitat features. Retained trees on certified urban capable land must not present an imminent risk to human life or property.		✓	✓
18A	Habitat Protection	Where trees are retained on certified urban capable land consider retaining adjacent supporting ecosystem features including trees of various sizes, native shrubs (mid story) and ground covers.		✓	✓

	Requirement	Controls	Low impact	Moderate impact	Major impact
19	Habitat Protection	Ensure retained trees are suitably set back from development. Avoid impacts to soil within the full extent of the Tree Protection Zone as per the Australian Standard AS 4970-2009 Protection of Trees on Development Sites. Tree protection fencing must be installed prior to any works commencing on site.		✓	✓
20	Habitat Protection	<p>Provide setbacks from development for grey-headed flying fox camps and raptors, if present on or adjacent to the site as below:</p> <p>a. Species: Grey-headed flying fox Control: Grey-headed flying fox camps require a 100 m setback to any development. The setback area should be maintained free of flying fox roosting habitat (i.e. standing trees).</p> <p>b. Species: Raptors (birds of prey) Control: Raptor nests require a 500 m circular setback from where nests are in undisturbed bushland, or a minimum circular setback distance of 250 m where nests adjacent to existing development. Owl nests require a 100 m circular setback from where nests are. Consideration of staged development options should be pursued to reduce impacts of construction on flight paths and disturbance of nest site. Construction should not impact on nesting or breeding seasons where possible.</p>		✓	✓

	Requirement	Controls	Low impact	Moderate impact	Major impact
21	Habitat Protection	Prior to any removal or disturbance of human-made structures, a suitably qualified ecologist should undertake a pre-clearance survey for microbats and their habitat. The survey should not be undertaken when microbats are likely to be in torpor. If microbats are located during surveys, or there is evidence of the structures being used as habitat, then the structures should be retained where possible. If not possible, the ecologist must ensure any individuals are dispersed or relocated in accordance with the relevant licences and best practice.	✓	✓	✓
22	Habitat Protection	Apply best-practice site hygiene protocols to manage the potential spread of <i>Phytophthora</i> and myrtle rust from adjacent land to avoided land, in accordance with the Arrive Clean, Leave Clean: Guidelines (Commonwealth of Australia, 2015).	✓	✓	✓
23	Fire Management	Undertake fire hazard management within APZ in the Greater Macarthur Growth Area to protect and enhance the <i>Pimelea spicata</i> (spiked rice flower) species in accordance with species mapping in the Cumberland Plain Assessment Report 2021.		✓	✓

The CPCP commitment that is being met by providing mitigation measures for riparian protection and waterways is outlined in **Table 12**.

Table 12: CPCP Commitment for Riparian Protection and waterways

Objective - Riparian protection and waterways	CPCP Commitment
Mitigate indirect and prescribed impacts from urban and industrial development, infrastructure and intensive plant agriculture on threatened ecological communities, species and their habitat.	Commitment 5

For all development on certified urban capable land that includes or is adjoining to native vegetation, the controls in **Table 13** apply.

Table 13: Mitigation measures for riparian areas — all development

	Requirement	Controls	Low impact	Moderate impact	Major impact
24	Waterway protection	Ensure development adjacent to the southern and western boundaries of Commonwealth land comprising the Orchard Hills Defence Establishment mitigates impacts to surface water flows and the water quality of Blaxland Creek in accordance with any relevant Australian Standards and guidance. This measure only applies to development in the Greater Penrith to Eastern Creek Investigation Area.	✓	✓	✓
25	Riparian Protection	Retain areas of the Proteaceae shrubs for the Eastern Pygmy Possum (<i>Cercartetus nanus</i>) along or adjacent to riparian areas, within open spaces or any other suitable locations to improve and maintain habitat connectivity in accordance with species mapping in the Cumberland Plain Assessment Report 2021.		✓	✓

Glossary

<i>Term</i>	<i>Definition</i>
<i>Asset Protection Zone (APZ)</i>	An asset protection zone is a buffer between a bushfire hazard and buildings. It is managed to minimise fuel loads and reduce potential radiant heat levels, flames, localised smoke and ember attack. The appropriate width for an asset protection zone is based on vegetation type, slope and the nature of the development.
<i>Avoided land</i>	Avoided land is the land that has been avoided from development and which represents areas of high biodiversity values to be protected. It is determined by applying the avoidance criteria and is subject to development controls to avoid or minimise impacts on biodiversity.
<i>Biodiversity approvals</i>	It meets requirements for strategic biodiversity certification under the <i>Biodiversity Conservation Act 2016</i> (NSW) and strategic assessment under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth).
<i>Biodiversity and Conservation SEPP 2021</i>	The Strategic Conservation Planning Chapter of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP) will ensure that development in the nominated areas is consistent with the commitments and actions of the Cumberland Plain Conservation Plan (CPCP). The Strategic Conservation Planning chapter of the B&C SEPP identifies avoided land, the strategic conservation area and certified urban capable land and applies development controls to these areas to support implementation of the CPCP.
<i>Certified major transport corridors</i>	Certified major transport corridors is land identified for future transport infrastructure that supports growth in Western Sydney. Major transport corridors include metro rail, freight rail lines, motorways or other transport links but not tunnel sections. The corridors program is administered by Transport for NSW. Certified major transport corridors are biodiversity certified under the <i>Biodiversity Conservation Act 2016</i> and included in the Plan's Western Sydney Major Transport Corridors class of actions description for approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
<i>Certified urban capable land</i>	Certified urban capable land is land identified for future urban development. This land will be biodiversity certified under Part 8 of the <i>Biodiversity Conservation Act 2016</i> and approved for urban development under Part 10 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> . Development in these areas does not require further site by site biodiversity assessment or approval under the <i>Biodiversity Conservation Act 2016</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> , if consistent with the Cumberland Plain Conservation Plan and its approvals. Other NSW planning and assessment legislation may also apply.
<i>CPCP area</i>	The Cumberland Plain Conservation Plan area covers around 200,000 hectares and includes the Cumberland IBRA subregion and some minor areas of the adjacent Sydney Cataract and Wollemi IBRA subregions. It extends from 10 kilometres north of Windsor to Picton in the south, and

	from the Hawkesbury-Nepean River in the west to east near Liverpool. It includes sections of eight Local Government Areas - Wollondilly, Camden, Campbelltown, Liverpool, Fairfield, Penrith, Blacktown and Hawkesbury.
<i>Cumberland Plain</i>	The Cumberland Plain is a relatively flat, broad geographic basin located within the Cumberland IBRA subregion, identified by dominant older shale and younger alluvial geology.
<i>Cumberland Plain Assessment Report</i>	The <u>Cumberland Plain Assessment Report 2021</u> has been prepared to meet the statutory requirements for the strategic assessment and strategic biodiversity certification. It assesses the impacts of proposed development on biodiversity and other values protected under NSW and Commonwealth biodiversity legislation.
<i>Cumberland Plain Conservation Plan (CPCP)</i>	The Cumberland Plain Conservation Plan (CPCP) is a strategic conservation plan to manage and offset the impacts on biodiversity from projected growth in Western Sydney. The CPCP will deliver a conservation program to protect and enhance biodiversity at a landscape scale while balancing the future needs of the local community.
<i>Commitments</i>	A commitment is a defined milestone in the Cumberland Plain Conservation Plan which will be met through the delivery of the actions.
<i>Development Control Plan (DCP)</i>	A development control plan provides detailed planning and design controls to guide development consistent with the aims of a Local Environmental Plan or State Environmental Planning Policy.
<i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	The <i>Environment Protection and Biodiversity Conservation Act 1999</i> is the Australian Government's central piece of environmental legislation, which provides a framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the <i>Environment Protection and Biodiversity Conservation Act 1999</i> as Matters of National Environmental Significance. Part 10 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> provides for the undertaking of strategic assessments.
<i>Essential Infrastructure</i>	Essential infrastructure is infrastructure to service and support urban and industrial development in the nominated areas identified in the CPCP. It includes development such as pipelines and pipeline corridors, roads and traffic, telecommunications and other communication facilities. The complete definition of essential infrastructure that meets the approval under <i>Environment Protection and Biodiversity Conservation Act 1999</i> is in Appendix A of the CPCP.
<i>Growth area</i>	A growth area is an area that has been identified by the Department of Planning, Housing & Infrastructure to address the needs of Sydney's growing population. They have been selected based on good access to existing or planned public transport connections, infrastructure and suitability for new homes and jobs.
<i>Indicative Layout Plan</i>	Indicative Layout Plan is a framework for the urban form and defines the critical components of the site. It shows the proposed division of land into lots, land use, drainage areas, vegetation conservation areas, roads, open spaces, amenities, etc. and other details as may be necessary.
<i>Koala corridors</i>	Koala corridors, or koala movement corridors, refer to areas of habitat (often but not always linear) which facilitate the movement and dispersal of koalas between habitat patches which would otherwise be disconnected. Koala corridors facilitate koala population dispersal, which

	protects against localised extinctions, as koalas require large, connected areas of important habitat for feeding and breeding.
<i>Local Environmental Plan (LEP)</i>	A Local Environmental Plan is an environment planning instrument that guides planning and development decisions within a local government area in NSW. This is achieved through zoning and development controls, which provide a framework for the way land can be used.
<i>Local Strategic Planning Statements (LSPS)</i>	A Local Strategic Planning Statement is a required document from councils that sets out how the local environment plans and development control plans evolve over time. It is intended to capture the area's 20- year vision for land use, local character, community values and change management strategies.
<i>Master planning</i>	Is a process by which analysis is undertaken and strategies are prepared to create a long-term plan or vision focusing mostly on the built environment of a regional area, a precinct or a group of precincts. Master planning results in coordinated proposals for buildings, infrastructure, spaces, circulation, and land use etc. These are conceived in three dimensions and are supported by carefully orchestrated delivery strategies. Master plan, concept plan, development framework, regeneration strategy, vision etc are often used interchangeably. This can include Planning Proposals and large scale subdivisions.
<i>Ministerial Direction</i>	A ministerial direction is a set of rules issued by the Minister for Planning to relevant planning authorities under section 9.1(2) of the <i>Environmental Planning and Assessment Act 1979</i> . These directions apply to planning proposals lodged with the Department of Planning, Housing, and Infrastructure.
<i>Mitigation measures</i>	Mitigation measures address indirect and ongoing impacts on biodiversity as a result of increased urbanisation and development. Mitigation measures can include habitat protection, such as minimum set-backs of development to fauna populations, and maintaining safe passage of animals through fencing and road design structures.
<i>Nominated areas</i>	A nominated area is an area in Western Sydney identified for future growth which seek approvals through the CPCP under the <i>Biodiversity Conservation Act 2016</i> (NSW) and <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth). These areas are: Greater Macarthur Growth Area, Greater Penrith to Eastern Creek Investigation Area, Western Sydney Aerotropolis and Wilton Growth Area.
<i>Native vegetation</i>	Native vegetation is any plant native to NSW prior to European settlement, defined in Part 5A of the <i>Local Land Services Act 2013</i> . It can also include any plant, living or dead, in mapped Category 2-vulnerable land and generally excludes marine vegetation. Native vegetation species when occurring together form native vegetation communities, which in NSW are called Plant Community Types.
<i>Planning proposal</i>	A document and supporting information that explains the intended effect and justification of a proposed Local Environmental Plan (LEP) or amendment to an LEP.
<i>Plant Community Types (PCT)</i>	Plant community types are the community-level grouping used in NSW's planning and assessment tools and vegetation mapping programs. They are identified in the Bionet Vegetation Classification (Vegetation Information System) database.

<i>Precinct planning</i>	Precinct planning ensures that nominated areas are strategically planned and infrastructure is delivered in a coordinated manner. The program identifies the development intent and development capacity across an entire precinct, through the allocation of housing choices, built form, infrastructure, and environmental and open space desires.
<i>Proponent</i>	A developer, landowner or third party who initiates a proposal, prepares a planning proposal and submits it to the relevant council.
<i>Protected koala habitat</i>	Land that is identified in the Protected Koala Habitat and Restoration map as either 'Protected Koala Habitat' or 'Potential Restoration for Protected Koala Habitat'. This map can be viewed on the CPCP Spatial Viewer.
<i>Riparian</i>	Riparian refers to lands that relate to waterways and parts of the landscape influenced by streams and flowing fresh water. A riparian corridor is defined in the Biodiversity Assessment Method as being within a certain distance from the top of the bank of a waterway of particular size.
<i>Spatial viewer</i>	The Cumberland Plain Conservation Plan (CPCP) Spatial Viewer displays publicly available spatial CPCP information including exhibited and updated land categories and the strategic conservation area, <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> , protected koala habitat, and other supporting planning and environmental layers.
<i>Strategic conservation area (SCA)</i>	The strategic conservation area was determined using the Conservation Priorities Method and represents large remnants of regionally significant biodiversity with good connectivity, or areas with the potential to enhance connectivity in the Cumberland Plain Conservation Plan (CPCP) Area. The strategic conservation area will be used to identify potential conservation lands for further investigation.
<i>Threatened ecological community (TEC)</i>	An ecological community may be listed by the NSW Threatened Species Scientific Committee under the <i>Biodiversity Conservation Act 2016</i> (NSW) and/or the Commonwealth Threatened Species Scientific Committee under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth). A threatened ecological community may be listed as vulnerable, endangered or critically endangered depending on the level of threat and risk of its collapse.
<i>Tree Protection Zone</i>	Tree protection zone is defined the same as the <i>Australian Standard AS 4970-2009 Protection of Trees on Development Sites</i> . Tree Protection Zone radius is calculated for each tree by multiplying its diameter at breast height (1.4m above ground level) by 12.