



Environment,
Climate Change
& Water



Planning

Draft EPBC Act Strategic Assessment Report for the Sydney Growth Centres Program

May 2010

FOR PUBLIC CONSULTATION

Prepared by Eco Logical Australia for the NSW Government with support and input from the Department of Planning and the Department of Environment, Climate Change and Water

Draft EPBC Act Strategic Assessment Report for the Sydney Growth Centres Program

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Abbreviations

ABBREVIATION	DESCRIPTION
API	Aerial Photograph Interpretation
CHL	Commonwealth Heritage List
cm	Centimetre
COAG	Council of Australian Governments
DCP	Development Control Plan
DECCW	NSW Department of Environment, Climate Change and Water
DEWHA	Commonwealth Government Department of the Environment, Water, Heritage and the Arts
DoP	NSW Department of Planning
EEC	Endangered Ecological Community
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	NSW <i>Environmental Planning and Assessment Regulation 2000</i>
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Protection Act 1999</i>
GCC	Growth Centres Commission
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006</i>
ha	Hectare
HMV	Higher Long Term Management Viability
km	Kilometre
LEP	Local Environmental Plan
LMV	Low Long Term Management Viability
m	Metre
mm	Millimetre
MMV	Moderate Long Term Management Viability
NHL	National Heritage List
NP&W Act	NSW <i>National Parks and Wildlife Act 1974</i>
RBM	Relevant Biodiversity Measure
RNE	Register of the National Estate
RTA	NSW Roads and Traffic Authority
SEPP	State Environmental Planning Policy

SIC	Special Infrastructure Contribution
The Atlas	NSW Wildlife Atlas
The Program	Sydney Growth Centres Program
ToR	Terms of Reference
TSC Act	NSW <i>Threatened Species Conservation Act 1995</i>
WHL	World Heritage List

Executive Summary

BACKGROUND

The New South Wales (NSW) and Commonwealth Governments agree that the Growth Centres contain significant environmental values, as well as significant social and economic values in relation to the future Growth of Sydney. As a result, in November 2009, both Governments agreed to undertake a strategic assessment of the *Sydney Growth Centres Program* under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The *Sydney Growth Centres Program* (the Program) seeks to provide for residential, employment and conservation areas and related infrastructure for the North West and South West Growth Centres. It also seeks to provide for a range of other conservation areas throughout Western Sydney and the broader Sydney region.

The Program builds upon the Biodiversity Certification for the Growth Centres SEPP conferred in 2007 under the NSW *Threatened Species Conservation Act 1995*, supplemented with a range of additional measures for the strategic assessment that specifically target matters of national environmental significance listed under the EPBC Act.

This report (the draft strategic assessment report) analyses the potential impacts and outcomes of the Program in relation to the requirements of the EPBC Act (the Commonwealth Government's central piece of environmental legislation). The Program is described in detail in the *Sydney Growth Centres Program Report* (the draft Program Report) which should be read in conjunction with this report.

KEY BENEFITS

The key benefits of the strategic assessment approach are that:

- environmental, social and economic considerations are balanced at a regional scale;
- Biodiversity Certification under the NSW legislation will continue;
- significant conservation outcomes for matters of national environmental significance will be secured;
- the existing Growth Centres Biodiversity Offset Program will be refined to provide greater certainty for matters of national environmental significance;
- the vast majority of the best remaining vegetation in the Growth Centres will come under secure conservation management arrangements, while offsets for unavoidable vegetation loss will be obtained in the best available areas regionally. This avoids the alternative of site-by-site assessment and offsetting, which generally exacerbates vegetation fragmentation;
- avoids the potential for offsets to be required twice for the same impact (once under NSW and once under Commonwealth legislation); and
- potential delays in implementing the Growth Centres Program will be removed.

SUMMARY OF OUTCOMES FOR MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

Under the Program, the NSW Government commits to deliver conservation outcomes for matters of national environmental significance. In particular, the NSW Government will make every effort to ensure that:

- at least 2,400 ha of either Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest or other grassy woodland communities are protected outside of the Growth Centres (preference will be given to Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest followed by White Box, Yellow Box, Blakely's Red Gum Grassy Woodland and Derived Native Grassland);
- at least 132 ha of Shale Sandstone Transition Forest are protected; and
- offsets for other matters of NES are obtained through the expenditure of the Growth Centres Conservation Fund.

The NSW Government has committed \$530 million (in 2005/06 dollars) to securing land for conservation as part of the urban development of the Growth Centres. 25% will be used to secure land inside the Growth Centres and 75% (\$397.5 million in 2005/06 dollars) will be used to secure nearby land with similar ecological values. Of the \$397.5 million, 70% will be prioritised to secure conservation outcomes for matters of national environmental significance as outlined above.

RATIONALE FOR THE STRATEGIC ASSESSMENT

There are two drivers for this strategic approach to environmental assessment and management. Firstly, from an environmental perspective it will ensure that matters of national environmental significance have been identified, considered and addressed early in the planning process. This greatly increases the opportunity to protect matters of national environmental significance whilst providing sufficient land for urban development. Making commitments to the protection of these biodiversity assets ensures that government, development industry and community have a clear understanding of how key environmental issues will be managed within the Growth Centres.

Secondly, the Program, if endorsed by the Commonwealth Minister for the Environment, streamlines the planning process by removing the requirement for further assessment of individual developments under the EPBC Act. This reduces the time and cost of the approval process, increases the certainty for developers in delivering housing and infrastructure as well as providing greater certainty in relation to managing growth. As a result impacts are assessed and offsets are identified and secured only once, instead of twice (under NSW and Commonwealth environment legislation) for the same impact. These reductions in cost and risk have a positive effect on the ability of industry to provide affordable housing.

Site by site assessment, given the fractured nature of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest and other vegetation within the Growth Centres, would not guarantee greater or secure more effective conservation outcomes. Site by site assessment may prevent clearing of some additional areas of vegetation, however retention would be on private land in an urban context, providing a limited conservation or biodiversity outcome. In addition, conservation and biodiversity values retained would be likely to have low long term viability and diminish over time. It is preferable to consolidate potential offsets to deliver more effective and secure conservation outcomes.

SYDNEY GROWTH CENTRES PROGRAM

The Sydney Growth Centres Program represents a new approach to greenfield land release that aligns population growth with the development of housing, employment, infrastructure and services. The Program will provide for:

- residential, employment, open space, conservation and protected areas and related infrastructure within the North West and South West Growth Centres over the next 30+ years; and
- a \$530 million (in 2005/06 dollars) biodiversity offsets package to protect high conservation value areas both within and outside the Growth Centres.

The need for the Program stemmed from a history of generally ad-hoc and uncoordinated greenfield development that limited the ability of both the NSW Government and local Councils to consider social, economic and environmental issues at a regional scale. Dwellings to support population growth in Sydney are expected to be mostly provided in established areas (60-70%) with greenfield areas providing 30-40% of new dwellings. The Growth Centres will ensure that the predicted high levels of population growth over the next 30+ years are well managed through:

- the orderly sequencing of greenfield land release in time with the provision of infrastructure, to ensure the efficient use of Government resources;
- a sustainable urban structure including a mix of housing types; employment areas; open spaces, community services and infrastructure;
- the protection of biodiversity, regional open space and water resources;
- contributions from new development for regional and local infrastructure; and
- the focus of greenfield development in areas either already or proposed to be connected to the Sydney rail network.

The combined area of the Growth Centres will provide residential and employment lands for a population of around 500,000. This will include approximately 181,000 dwellings at a range of dwelling densities, providing housing choice for the future residents of Western Sydney. The Growth Centres will require significant investment in the upgrade and construction of new infrastructure, including roads, rail, education, health, emergency and justice services.

The North West Growth Centre is approximately 10,000 ha in size and is located within the local government area boundaries of Blacktown, Hawkesbury and the Hills. The Growth Centre is adjacent to Rouse Hill Regional Centre and is serviced by the existing Richmond rail line. The North West Growth Centre is made up of 16 precincts and has an estimated dwelling yield of approximately 70,000 dwellings.

The South West Growth Centre is within the local government area boundaries of Liverpool, Camden and Campbelltown. It is approximately 17,000 ha in size, will focus on the major centre of Leppington, and be serviced by the South West Rail Link. The South West Growth Centre is made up of 18 precincts and has an estimated dwelling capacity of approximately 110,000 dwellings.

Both the North West and South West Growth Centres contain areas of important biodiversity value. However, many areas are degraded and fragmented due to past and present landuse. The Program focuses on the areas of highest conservation value in the Growth Centres and provides appropriate levels of protection for those areas. In total within the Growth Centres, the Program will protect a minimum of 2,000 ha of existing native vegetation, including vegetation within the 1,000 ha of protected areas which are zoned for conservation purposes and will be brought into public ownership.

EPBC ACT STRATEGIC ASSESSMENT

The EPBC Act is the Australian Government's key piece of environmental legislation. It protects matters of national environmental significance which include: World and National heritage sites; wetlands of international importance; nationally threatened species and ecological communities; migratory species; and the Great Barrier Reef Marine Park.

The strategic assessment provides a mechanism to move away from a site-by-site impact assessment and examine the overall Program at a landscape scale. The process for the strategic assessment includes the following stages:

1. The Commonwealth Government Minister for the Environment (the Minister) enters into an agreement with another person to undertake a strategic assessment of the impacts of actions under a policy, plan or program (**completed**).
2. Terms of Reference are prepared for a report on the impacts relating to the agreement (**completed**).
3. A draft report is prepared (**completed**).
4. The draft report is exhibited for public comment for at least 28 days (**current**).
5. The Minister may recommend modifying the policy, plan or program.
6. The Minister may endorse the policy, plan or program if appropriate.
7. The Minister may approve actions under the policy, plan or program if appropriate (approval may include conditions).

The strategic assessment will ensure that matters of national environmental significance have been identified, considered and addressed during the planning process. This greatly increases the opportunity to protect areas of high conservation value whilst providing sufficient land for urban development. Making commitments to the protection of these biodiversity assets ensures that governments, the development industry and the community have a clear understanding of how key environmental issues will be managed within the Growth Centres.

The strategic assessment also aims to reduce the time and cost of the approval process, through increasing certainty for developers in delivering housing and infrastructure, and managing growth. These reductions in cost and risk have a positive effect on the ability of industry to bring land and housing to the market.

OUTCOMES FOR MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

This report assesses the nature and significance of potential impacts on matters of national environmental significance. The appropriate mitigation, management and offset measures to provide for long-term outcomes for key matters are also discussed.

Matters of national environmental significance that are likely to, or have the potential to be impacted through implementation of the Sydney Growth Centres Program are nationally listed:

- threatened species and ecological communities; and
- migratory species.

Potential impacts to these matters are discussed in relation to:

- threatened ecological communities;
- threatened flora; and
- threatened and migratory fauna.

No other matters of national environmental significance are considered likely to be impacted.

THREATENED ECOLOGICAL COMMUNITIES

Three ecological communities listed under the EPBC Act are present within the Growth Centres. These are:

- Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest;
- Shale Sandstone Transition Forest; and
- Turpentine Ironbark Forest in the Sydney Basin Bioregion.

For each of these ecological communities, the relative condition and long-term management potential of remaining vegetation was described using a concept known as “Management Viability”. Three categories of management viability were defined (High, Moderate and Low) to provide an indication of the relative importance of vegetation across the Growth Centres. High Management Viability areas are considered to be the most important to protect to achieve successful long term conservation outcomes.

Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest

Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest is listed as a critically endangered ecological community under the EPBC Act. The original extent of the ecological community has been significantly reduced across the Cumberland Plain due to agricultural and urban uses following European settlement.

Currently, there is a total of around 10,703 ha of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest across the Cumberland Plain. Approximately 2,185 ha of the listed community occurs within the Growth Centres. This area is highly fragmented and generally contains a greater proportion of areas of Low Management Viability vegetation compared with the Cumberland Plain as a whole.

Development within the Growth Centres has generally been focused on areas with Low and Moderate Management viability vegetation. Within the Growth Centres the Program will lead to:

- Retention of up to: 363 ha of High Management Viability, 347 ha of Moderate Management Viability, and 288 ha of Low Management Viability Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest; and
- Loss of up to: 27 ha of High Management Viability, 450 ha of Moderate Management Viability, and 710 ha of Low Management Viability Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest.

While important areas of the ecological community will be retained, the level of loss of the ecological community within the Growth Centres warrants the application of additional biodiversity offsets outside of the Growth Centres to compensate for the impacts within the development areas. The NSW Government has developed an offsets package for Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest that is consistent with the *Draft Cumberland Plain Recovery Plan* and which is focused on:

- Securing areas of the ecological community within the priority conservation lands of the Cumberland Plain. These priority lands have been identified by DECCW and represent the best opportunity for securing viable, long term conservation outcomes for vegetation within the region.
- Securing areas of other grassy woodlands within the broader region (Sydney Basin and Hawkesbury Nepean Catchment area) that have a similar floristic composition.

The NSW Government has committed to make every effort to ensure that at least 2,400 ha of either Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest, or other “grassy woodland” communities are protected outside of the Growth Centres (with preference given to Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest followed by White Box, Yellow Box, Blakely’s Red Gum Grassy Woodland and Derived Native Grassland).

There are a number of constraints to purchasing land within the Cumberland Plain, and an offset package that provides a balanced approach to securing Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest and other (much more cost-effective) grassy woodlands in the region is considered appropriate.

Shale Sandstone Transition Forest

Shale Sandstone Transition Forest is listed as an endangered ecological community under the EPBC Act. Currently, there are approximately 9,950 ha of the ecological community which occurs in an area bounded by Sackville in the north, Mulgoa to the west, Wilton in the south and Revesby to the east, with the bulk of the community occurring in the Hawkesbury, Hills Shire, Liverpool, Parramatta, Penrith, Campbelltown and Wollondilly local government areas.

28% of the ecological community is considered to be High Management Viability, with none of this higher quality vegetation occurring within the Growth Centres. There are a total of approximately 310 ha of Shale Sandstone Transition Forest within the Growth Centres. The ecological community only occurs in the North West Growth Centre.

Development within the Growth Centres will lead to the loss of approximately 66 ha of good quality vegetation. It is considered that there are good prospects for securing offsets for Shale Sandstone Transition Forest within the Cumberland Plain to compensate for these impacts. The NSW Government will make every effort to meet an offset target of 132 ha for Shale Sandstone Transition Forest.

Turpentine Ironbark Forest

Turpentine Ironbark Forest in the Sydney Basin Bioregion is listed as a critically endangered ecological community under the EPBC Act. A total of 2.2 ha of Turpentine Ironbark Forest occurs within the North West Growth Centre and is likely to be cleared over time. However, this patch of vegetation is of Low Management Viability and impacts to the ecological community are considered to be low.

THREATENED FLORA

This Report provides a detailed assessment of the presence and potential impacts of development on the EPBC listed threatened flora species that occur within the Growth Centres. These flora species are Downy Wattle (*Acacia pubescens*), *Darwinia biflora*, *Dillwynia tenuifolia*, Small-flowered Grevillea (*Grevillea parviflora* subsp. *Parviflora*), *Micromyrtus minutiflora*, *Persoonia hirsuta*, *Persoonia nutans*, *Pimelea spicata* and *Pultenaea parviflora*.

Comprehensive site by site survey information for threatened flora species within the Growth Centres is not available. The analysis undertaken in this report uses various sources of information to understand the importance of the Growth Centres as potential threatened flora species habitat.

Downy Wattle (*Acacia pubescens*)

Acacia pubescens is listed as vulnerable under the Commonwealth EPBC Act and the NSW *Threatened Species Conservation Act 1995* (TSC Act).

While the Growth Centres occur outside the core population for *A. pubescens*, both known and potential habitat for the species occurs within the area. The Program provides for the protection of the two known records within the South West Growth Centre. However, some level of impact (which cannot be quantified) to potential habitat within the Growth Centres is considered likely to occur. Offsets that increase the number of known sites of *A. pubescens* in conservation are considered to therefore be appropriate.

Based on the protection of known records and areas of potential habitat within the Growth Centres, and offsets for Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest that protect additional areas of potential habitat for *A. pubescens*, the conservation outcome for the species is considered to be appropriate.

Darwinia biflora

Darwinia biflora is listed as vulnerable under both the Commonwealth EPBC Act the NSW TSC Act.

The species occurs within the North West Growth Centre in North Kellyville. Within this area there are 12 reliably recorded sites. Of these, six sites will be lost and six retained including an estimated population of 5,000-10,000 individuals. The habitat to be retained is considered to be important to the species conservation given that it supports a large population and occurs at the western limit of its range. Retention of this site is consistent with one of the key objectives of the recovery plan for the species.

Dillwynia tenuifolia

Dillwynia tenuifolia is listed as vulnerable under both the Commonwealth EPBC Act and the NSW TSC Act.

The key measure to prevent, mitigate and manage potential impacts to this species is the retention and protection of habitat supporting the four important populations known to occur within the Growth Centres. These include the populations within the Marsden Park North Precinct, the Air Services Australia site at Shanes Park, the area adjacent to the Colebee Precinct and the large population within the Kemps Creek Precinct. Direct impacts to these important populations have been minimised or avoided.

Small-flowered Grevillea (*Grevillea parviflora* subsp. *Parviflora*)

Grevillea parviflora subsp. *parviflora* is listed as vulnerable under both the Commonwealth EPBC Act and the NSW TSC Act.

The South West Growth Centre supports one known population of *G. parviflora* subsp. *parviflora*. This population occurs at Kemps Creek, and is considered important due to its occurrence in the northern limit of the species distribution and its reasonably large size. As this important population will be retained and managed in its entirety, the Program is expected to deliver a net positive outcome for *G. parviflora* subsp. *parviflora*.

Micromyrtus minutiflora

Micromyrtus minutiflora is listed as vulnerable under the Commonwealth EPBC Act and endangered under the NSW TSC Act.

The North West Growth Centre supports two important populations of the species. These are a population within the Marsden Park North Precinct and one within the Air Services Australia site at Shanes Park. Both populations are considered to be important to the preservation of the species as they are of a significantly large size and occur around the eastern limit of the species distribution. The Program is expected to deliver a positive net outcome for *M. minutiflora* as both populations are afforded protection and on-going management through the Program.

However, there may be some level of impact to *M. minutiflora* as a result of development within the Growth Centres. This impact includes the loss of a component of the known population within the Marsden Park North Precinct and the loss of areas of potential habitat around the Marsden Park area and further north in the Riverstone/Vineyard area. It is considered that these known and potential impacts have been more than adequately offset through the purchase of the Cranebrook site (outside of the Growth Centres), which supports a very large and significant population of the species.

Persoonia hirsuta

Persoonia hirsuta is listed as endangered under both the Commonwealth EPBC Act and the NSW TSC Act.

Targeted surveys in 2007 for the one potential location for the species failed to record its presence, supporting the conclusion that this population was killed by fire. While impacts from the Program are not expected, an area of potential habitat will be retained in North Kellyville through zoning as Environmental Management.

Persoonia nutans

Persoonia nutans is listed as endangered under both the Commonwealth EPBC Act and the NSW TSC Act.

The key measure to prevent, mitigate and manage potential impacts to *P. nutans* is the retention and protection of habitat supporting the two important populations known to occur within the Growth Centres. These populations both occur within the Kemps Creek Precinct. Direct impacts to these important populations have been minimised or avoided.

Pimelea spicata

Pimelea spicata is listed as endangered under both the Commonwealth EPBC Act and the NSW TSC Act.

The Program provides for the protection of the known important population within the South West Growth Centre. However, some level of impact to potential habitat within the Growth Centres is considered likely to occur. The scale of these potential impacts is considered to be moderated by the fact that:

- the species has a relatively scattered distribution within the Cumberland Plain and the majority of known populations support small numbers of individuals; and
- the proportion of known *P. spicata* records within the Growth Centres is low.

Given that some level of residual impact is expected, offsets that protect additional areas of potential habitat for *P. spicata* are considered to be appropriate. The Program's focus on offsets for Cumberland

Plain Shale Woodlands and Shale Gravel Transition Forest is expected to provide a complementary benefit for *P. spicata* given that the species' preferred habitat type is linked to the same vegetation types.

Pultenaea parviflora

Pultenaea parviflora is listed as vulnerable under the Commonwealth EPBC Act and endangered under the NSW TSC Act.

The key measure to prevent, mitigate and manage potential impacts to *P. parviflora* is the retention and protection of habitat supporting four populations known to occur within the Growth Centres. These include the populations within the Marsden Park North Precinct, the Air Services Australia site at Shanes Park, the area adjacent to the Colebee Precinct and the population within the Kemps Creek Precinct. Direct impacts to the majority of these populations have been minimised or avoided. They have each been afforded a level of protection through the Program, ensuring a positive net outcome compared with the status quo. Furthermore, a very large population will be protected as the Cranebrook site, which was formerly owned by Air Services Australia, has been purchased.

THREATENED AND MIGRATORY FAUNA

Seven listed threatened fauna species are known or have the potential to occur within the Growth Centres. Ten migratory species (two of which are also threatened) also have the potential to occur within the Growth Centres.

For the majority of these species the Growth Centres area does not support important habitat or an ecologically significant proportion of the species population. As such, it is considered unlikely that the majority of species that may occur will be impacted by the Program.

Of the species that occur in the Growth Centres, a detailed assessment of the presence and potential impacts of development on four EPBC Act listed fauna species has been undertaken. These fauna species are:

- Swift Parrot (*Lathamus discolor*);
- Green and Golden Bell Frog (*Litoria aurea*);
- Large-eared Pied Bat (*Chalinolobus dwyeri*); and
- Grey-headed Flying-fox (*Pteropus poliocephalus*).

Swift Parrot

The Swift Parrot (*Lathamus discolor*) is listed as endangered under both the Commonwealth EPBC Act and NSW TSC Act. It is also listed as a marine species under the EPBC Act.

The Swift Parrot breeds in Tasmania and over-winters on mainland Australia. The principal over-wintering habitat on the mainland are the box-ironbark forests and woodlands inland of the Great Dividing Range in Victoria and NSW and along the coastal plains. The species has been recorded twice within the South West Growth Centre in the Edmondson Park Precinct, and once within the North West Growth Centre in the Shanes Park Precinct.

The Program will result in the removal of a range of potential woodland foraging habitat across both the North West and South West Growth Centres. However, the Growth Centres are not known to be important for the species and the loss of potential habitat will be small relative to the species' broader range. Potential foraging habitat for the species in the local area is conserved in Scheyville National Park, Windsor Downs Nature Reserve and Castlereagh Nature Reserve.

Within the Growth Centres, 2,000 ha of native vegetation will be retained within conservation zones, including significant areas of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest (which is recognised as habitat for the species). Furthermore, offsets outside of the Growth Centres will also contain Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest and other potential foraging habitat for the Swift Parrot.

The Swift Parrot is a highly mobile species that is able to utilise a variety of woodland habitats, and as such it is considered likely that the species will use remaining vegetation remnants within and outside of the Growth Centres with little disturbance to their current activity.

Green and Golden Bell Frog

The Green and Golden Bell Frog (*Litoria aurea*) is listed as vulnerable under the Commonwealth EPBC Act and endangered under the NSW TSC Act. The species has been recorded along the south-east coast of Australia, from East Gippsland in Victoria, north to approximately Byron Bay in north-east NSW.

The species has been recorded in the North West Growth Centre at Riverstone, and there are numerous records outside of the Growth Centres within the broader Western Sydney region. There are no records for the species within the South West Growth Centre.

The habitat supporting the two records of Green and Golden Bell Frog in the Riverstone Precinct occurs within a non-certified area under the Growth Centres Biodiversity Certification. The final Precinct Plan is expected to include provisions requiring the protection or rehabilitation of the existing habitat, which is generally degraded. (Note: At the time of printing the Riverstone Precinct Plan is yet to be finalised).

However, given the existence of areas of similar habitat elsewhere within the Riverstone Precinct (along much of the flood prone areas) and the wider North West Growth Centre there is some potential for impacts to the species outside of the non-certified area. Major drainage lines and associated vegetation throughout the Growth Centres will be retained through the development controls placed on flood prone areas. It is considered that these measures will provide adequate protection for potential Green and Golden Bell Frog habitat.

Large-eared Pied Bat

The Large-eared Pied Bat (*Chalinolobus dwyeri*) is listed as vulnerable under both the Commonwealth EPBC Act and NSW TSC Act. The current and former distributions of the Large-eared Pied Bat are poorly known. Records exist from Shoalwater Bay (north of Rockhampton, Queensland) through to the vicinity of Ulladulla, NSW.

While there are no known important populations or important areas of habitat for the Large-eared Pied Bat within the Growth Centres, there is one record of the species in the North West Growth Centre at Schofields. Potential, although unconfirmed, roosting habitat also occurs in sandstone outcrops along Cattai Creek within the North Kellyville Precinct.

The vegetation surrounding the recorded sighting, and vegetation near the potential roosting habitat at Cattai Creek, will be retained through development controls and zoning.

Grey-headed Flying-fox

The Grey-headed Flying-fox (*Pteropus poliocephalus*) is listed as vulnerable under both the Commonwealth EPBC Act and NSW TSC Act. The species is known to occur along the eastern coast of Australia from Bundaberg in Queensland to Melbourne in Victoria.

The NSW Wildlife Atlas records a number of sightings of the Grey-headed Flying-fox across the eastern portion of the North West and South West Growth Centres; however these records are relatively low in number compared to areas outside of the Growth Centres. The Growth Centres are not known to support any camps, important populations or important areas of habitat for the species.

While some potential foraging habitat within the Growth Centres will be removed, this habitat is not considered to be important habitat, and the species' high mobility in nightly foraging movements suggests that it may travel between areas of vegetation retained within the Growth Centres as well as between vegetation remnants in the broader Western Sydney region.

The 2,000 ha of native vegetation that will be retained within the Growth Centres is likely to provide continued access to foraging habitat for this broad ranging species. The Grey-headed Flying-fox forages on a considerable range of species and through many different ecological communities. Lands retained as offsets are likely to provide security to more foraging sites for the species, providing a beneficial outcome for the species.

CONCLUSION

The Sydney Growth Centres Program has been developed to ensure that the high level of growth in the Sydney Metropolitan region is planned and managed in a structured and coordinated way. The Program provides for both the required growth in housing, employment and infrastructure, whilst conserving areas of high biodiversity value.

The EPBC Act strategic assessment provides the opportunity to address biodiversity conservation in a strategic way focusing on landscape scale outcomes within the Cumberland Plain and broader Sydney region. An important feature of the strategic nature of the Program is the pooling of resources (through developer contributions) to enable appropriate outcomes for matters of national environmental significance and in particular to obtain offsets that are viable and cost-effective.

If approved, the strategic assessment will allow development to proceed without further assessment, streamlining approval processes, and significantly improving housing supply and affordability. The administration costs of piecemeal assessment and compliance assurance, which can be costly and deliver less significant environmental outcomes, will also be avoided. The strategic assessment approach is new, requiring flexibility to enable real, not paper, biodiversity conservation outcomes to be secured. These benefits would be unable to be achieved through site by site assessment.

PART A - OVERVIEW

1 Introduction

In November 2009, the New South Wales (NSW) and Commonwealth Governments commenced a strategic assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) of the potential impacts likely to arise through implementation of the *Sydney Growth Centres Program*.

The *Sydney Growth Centres Program* (the Program) seeks to provide for residential, employment and conservation areas and related infrastructure within the North West and South West Growth Centres of Sydney (see Figure 1). It also seeks to provide for a range of other conservation areas throughout Western Sydney and the broader Sydney region.

Planning for the Growth Centres began in 2004 and evolved from the need to provide housing and employment lands and associated infrastructure over the next 30+ years in Sydney. The *Metropolitan Strategy: City of Cities - A Plan for Sydney's Future* identified the Growth Centres as the preferred option for delivering these outcomes.

Since that time, the Program has been developed and approved under NSW planning and threatened species legislation. It is now the subject of consideration by the Commonwealth. This strategic assessment under the EPBC Act comprises two key documents: the draft Strategic Assessment Report (this report) which provides a detailed assessment of the implications of the Program for matters of national environmental significance; and the draft Program Report which identifies the elements of the program and the commitments and undertakings of the NSW Government for the protection and management of matters of national environmental significance protected under the EPBC Act. The Program is also summarised in Section 2 of this report.

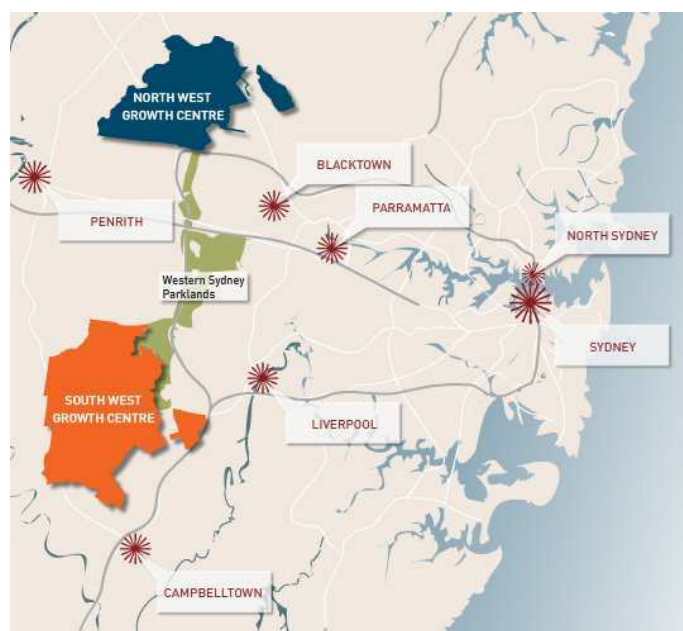


Figure 1: Location of the North West and South West Growth Centres

1.1 THE EPBC ACT AND STRATEGIC ASSESSMENT

The EPBC Act is the Commonwealth Government's key piece of environmental legislation. It protects matters of national environmental significance which include:

- World heritage sites;
- National heritage places;
- Wetlands of international importance;
- Nationally threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- Nuclear actions; and
- The Great Barrier Reef Marine Park.

Strategic assessments occur under Part 10 of the EPBC Act. They provide a mechanism to move away from site-by-site impact assessment and examine proposed developments at a landscape scale in relation to the requirements of the EPBC Act. The strategic assessment process is described in Table 1 below.

Table 1: Sydney Growth Centres Strategic Assessment process

Process	Status
1. The Commonwealth Government Minister for the Environment enters into an agreement with another person to undertake a strategic assessment of the impacts of actions under a program <i>In this case the Commonwealth Government entered into an agreement with the NSW Government to assess the Sydney Growth Centres Program.</i>	COMPLETED
2. Terms of Reference are prepared for a strategic assessment report on the impacts relating to the Program.	COMPLETED
3. A draft strategic assessment report is prepared.	COMPLETED
4. The draft strategic assessment report is exhibited for public comment for at least 28 days.	CURRENT
5. Following public comment the strategic assessment report is revised as appropriate.	-
6. Following consideration of the Program and the final strategic assessment report, the Commonwealth Minister has the ability to recommend modifications to the Program.	-
7. The Commonwealth Minister may endorse the Program if it meets the requirements of the EPBC Act.	-
8. The Commonwealth Minister may then approve actions under the Program if appropriate (approval may include conditions).	-

The Commonwealth Government Department of the Environment, Water, Heritage and the Arts (DEWHA) administers the strategic assessment provisions of the EPBC Act and provides advice to the Commonwealth Minister throughout the process.

1.2 CURRENT STATUS OF THE STRATEGIC ASSESSMENT

The strategic assessment is being conducted in accordance with an agreement between the Commonwealth and NSW Governments (see Appendix A). This agreement sets out a framework for the assessment of the Program against the requirements of the EPBC Act and provides for:

- detailed Terms of Reference for the preparation of a Strategic Assessment Report; and
- Endorsement Criteria that must be met in order for the Commonwealth Government to endorse the Program.

An initial step in the assessment process was to develop and publically exhibit draft Terms of Reference (ToR) for the strategic assessment report. The draft ToR were exhibited from 17 November to 23 December 2009 and have subsequently been finalised based on the outcomes of this process. The finalised Terms of Reference and Endorsement Criteria are available at Appendix A.

This document is the draft strategic assessment report.

The report seeks to examine the combined impacts of actions likely to result from the proposed developments outlined in the Program. It focuses on the matters protected by the EPBC Act (i.e. matters of national environmental significance) and assesses (among other things):

- the matters of national environmental significance that occur within the vicinity of the Program area;
- potential impacts to those matters as a result of actions arising from the Program;
- the proposed mitigation, management and offset measures that the NSW Government will put in place to protect matters of national environmental significance; and
- the overall conservation outcomes that will be achieved through the implementation of the Program.

It has been developed to address the finalised ToR and for the purpose of being exhibited for public consultation. It will be amended in response to the comments received and provided to the Commonwealth Minister for the Environment for his consideration.

It is important to note that this draft strategic assessment report does not seek to address the requirements of NSW planning or environment legislation. Those requirements have been, and continue to be, addressed through separate processes at the State level.

This Draft Strategic Assessment Report is structured as follows:

- Part A – OVERVIEW
 - o *Section 1:* provides an introduction to the project and the issues to be assessed.
 - o *Section 2:* summarises the Sydney Growth Centres Program.
 - o *Section 3:* outlines the environment to be affected by the Program.

- Part B – NES ANALYSIS
 - o *Section 4*: analyses the nature and importance of impacts to EPBC Act listed threatened ecological communities.
 - o *Section 5*: analyses the nature and importance of impacts to EPBC Act listed threatened flora.
 - o *Section 6*: analyses the nature and importance of impacts to EPBC Act listed threatened fauna.
- Part C – ESD & INFORMATION REVIEW
 - o *Section 7*: summarises the social and economic justification behind the Program and examines the Program in relation to the principles of ecologically sustainable development.
 - o *Section 8*: discusses the uncertainty associated with the Program.
 - o *Section 9*: analyses the information base for the strategic assessment process.
 - o *Section 10*: examines the Program against the Endorsement Criteria.
 - o *Section 11*: provides a conclusion to the Draft Strategic Assessment Report.

2 Sydney Growth Centres Program

As outlined in Section 1, the Growth Centres Program (the Program) will provide for:

- residential, employment and protected areas and related infrastructure within the North West and South West Growth Centres over the next 30+ years; and
- a \$530 million biodiversity offsets package to protect high conservation value areas both *within and outside* the Growth Centres.

The Program is described in detail in the *Sydney Growth Centres Program Report* which can be viewed in conjunction with this draft strategic assessment report. The Program Report is structured as follows:

- Section 1 provides an introduction to the Program Report.
- Section 2 provides the context for the strategic assessment and a discussion of the environmental and planning issues that relate to the Program.
- Section 3 provides a description of the Program.
- Section 4 outlines the implementation of the Program. It includes: an overview of the legislation; a description of the relevant planning tools; and detail about the processes related to implementing the Program.
- Section 5 provides the NSW commitments to conservation outcomes for the relevant matters of national environmental significance.
- Section 6 provides a description of the monitoring, evaluation and reporting elements that will provide information on the progress of the program.

This section summarises the Program for the purposes of setting context for the assessment.

Note - In order to provide a complete and consistent Draft Strategic Assessment Report, text is drawn directly from the Draft Program Report. However, for full detail about the Program, reference should be made to the Program Report itself.

2.1 RATIONALE FOR THE PROGRAM

The population of Sydney is projected to grow by 1.7 million to 6 million by 2036, creating demand for around 770,000 new dwellings (DoP 2010). The NSW Government plans for 30-40% of these dwellings to be located in new release areas, primarily in the North West and South West Growth Centres. Significantly 60-70% of all new dwellings will be located in established areas. Greenfield development will be important but proportionally smaller contributor of future dwellings in Sydney.

The focusing of new release areas in the Growth Centres has several clear benefits over the alternative of numerous minor release areas, including:

- Residential areas, employment lands, town centres and open space can be better planned and integrated with the broader metropolitan area;
- Infrastructure planning and provision is coordinated and linked to sequenced land release to maximise return on government investment in infrastructure;
- Environmental outcomes can be achieved at a landscape scale; and
- Planning and development processes themselves (funding and undertaking studies, plan preparation, assessment, consultation etc) can be streamlined. This is important where land ownership is fragmented which makes it difficult to achieve co-operation among landowners. The Growth Centres Program overcomes these issues.

In essence the Growth Centres approach provides a better land use, conservation and infrastructure planning outcome, efficiently utilising Government's investment in planning and infrastructure delivery, in reduced timeframes whilst also securing landscape scale approvals.

There are two drivers for this strategic approach to environmental assessment and management.

Firstly, from an environmental perspective it will ensure that matters of national environmental significance have been identified, considered and addressed early in the planning process. This greatly increases the opportunity to protect areas of high conservation value whilst providing sufficient land for urban development. Making commitments to the protection of these biodiversity assets ensures that government, development industry and community have a clear understanding of how key environmental issues will be managed within the Program.

Secondly, the Program, if endorsed under the EPBC Act streamlines the ongoing planning process by removing the requirement for further assessment of individual developments under the EPBC Act. This reduces the time and cost of the approval process, increases the certainty for developers in delivering housing and infrastructure as well as providing greater certainty in relation to managing growth. These reductions in cost and risk have a positive effect on the ability of industry to bring land to the market for housing.

Site by site assessment, given the fractured nature of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest and other vegetation within the Growth Centres, would achieve less secure and less effective conservation outcomes. Site by site assessment may prevent clearing of some additional areas of moderate or low management viability, however retention would be on private land in an urban context providing a limited conservation or biodiversity outcome. Conservation values retained would be likely to have low long term viability and diminish over time. It is preferable to consolidate potential offsets to deliver more effective and secure conservation outcomes.

The Program is currently being implemented under NSW planning and environment legislation, and is now the subject of Commonwealth Government strategic assessment (under the EPBC Act). The Commonwealth and NSW Governments have agreed that the strategic assessment will be based on the Growth Centres Biodiversity Certification which is already in place. Significantly, this removes the possibility of offsets being required twice for the same impact – once under NSW legislation and once under the Commonwealth legislation.

The Council of Australian Governments (COAG) support the use of strategic assessments as a landscape scale approach to biodiversity and environmental conservation as it is considered to provide greater certainty, reduce duplication and provide greater protection for the environment (Hawke 2009).

COAG has also developed national criteria for capital city strategic planning systems to ensure that Australian cities are 'globally competitive, productive, sustainable, liveable and socially inclusive and well placed to meet future challenges and growth' (COAG 2009). Continued implementation of the Program will support the COAG objectives by providing for 'planned, sequenced and evidence-based land release and an appropriate balance of infill and greenfields development' (2009); while also addressing national policy issues such as population growth, efficient development and use of existing and new infrastructure; housing affordability and matters of national environmental significance. The COAG strategic planning criteria also acknowledge the importance of coordination between local, State and Commonwealth Governments in achieving streamlined and efficient approval processes, including under the EPBC Act.

Both the Commonwealth and NSW Governments acknowledge the advantages of strategic, landscape level assessments of such major development programs. By addressing biodiversity at the strategic planning stage instead of the development application stage, unavoidable impacts can be assessed and resources can be pooled to obtain offsets which are viable and cost-effective. Development can then proceed without further assessment, streamlining the process and significantly improving housing supply and affordability. The administration of piecemeal assessment and compliance assurance, which can be costly and deliver less significant outcomes, is avoided. This approach is new, requiring flexibility to enable real, not paper, biodiversity conservation outcomes to be secured.

2.2 HISTORY OF THE PROGRAM

The Program has been in development since 2004. This has involved a substantial amount of planning at the state level. In 2006 the Growth Centres were formally established under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act), and in 2007 Biodiversity Certification was conferred on the Growth Centres SEPP under the NSW *Threatened Species Conservation Act 1995* (TSC Act).

Since that time, more detailed planning has occurred for a number of areas within the Growth Centres and the strategic assessment under the EPBC Act has commenced. Table 2 outlines the history of the Program.

Table 2: History of the Growth Centres Program

May 2004	NSW Government released <i>Sydney Metropolitan Strategy – Ministerial Directions Paper</i> . This paper explored the future of land release in the North West and South West and outlined the aim of achieving 30% of new residential land supply in Greenfield locations.
Sept 2004	NSW Government released <i>Sydney Metropolitan Strategy – Discussion Paper</i> . This paper included nine directions for the Metro Strategy including managing growth and valuing non urban areas, by limiting urban sprawl and directing new greenfield development to specific growth areas.
June – Oct 2005	Exhibition of draft plans for <i>Managing Sydney's Growth Centres</i> . The exhibition included planning and infrastructure reports outlining the Government's commitment to adopting a new approach to land releases by identifying the Growth Centres, to ensure that Sydney's growth occurs in a sustainable way with new infrastructure planned, funded and linked to the properly sequenced release of land.

July 2005	The Growth Centres Commission (GCC) was established under the <i>Growth Centres (Development Corporation) Act 1974</i> , to coordinate planning and infrastructure for the Growth Centres.
December 2005	<i>Metropolitan Strategy: City of Cities - A Plan For Sydney's Future</i> released. The Metropolitan Strategy includes a range of actions and objectives supporting the role and functions of the former GCC in delivering urban development within the Growth Centres. In particular, the Metropolitan Strategy identifies the importance of focussing greenfield development in the North West and South West Growth Centres in order to protect other land of resource/agricultural and environmental significance and to provide for the efficient use of water, sewage, road, rail and other social infrastructure.
Jan - March 2006	Exhibition of the draft <i>State Environmental Planning Policy (Sydney Region Growth Centres)</i> by the Department of Planning. The Draft SEPP established the statutory plans and processes that would apply in the Growth Centres. The North West and South West Structure Plans were also exhibited. The Structure Plans show indicative locations for centres, major road and public transport routes and future employment areas. Over 750 submissions were received and considered.
June 2006	First release precincts announced including Oran Park, Turner Road, North Kellyville, Riverstone West, Riverstone and Alex Avenue and precinct planning commenced.
July 2006	Gazettal of the Growth Centres SEPP.
Feb – April 2007	Exhibition of the Draft Growth Centres Conservation Plan and notice of proposed biodiversity certification of the Growth Centres SEPP were exhibited from February to April 2007. More than 200 submissions were received. These were considered by the NSW Minister for Climate Change and the Environment.
Dec 2007	Biodiversity Certification under the NSW <i>Threatened Species Act 1995</i> was conferred on the Growth Centres SEPP. Oran Park and Turner Road Precincts rezoned for urban development [land to accommodate approximately 11,560 new dwellings].
June 2008	Marsden Park Industrial Precinct released for urban development and precinct planning commenced.
Nov 2008	Role and functions of the GCC merged into the Department of Planning and are now undertaken by the Office of Strategies and Land Release in the DoP.
Dec 2008	North Kellyville Precinct rezoned for urban development [land to accommodate approximately 4,500 new dwellings].
August 2009	Riverstone West Precinct rezoned [155 hectares of employment land to provide 12,000 new jobs]
Oct 2009	Release of the second release precincts – Austral, Leppington North, Box Hill, Box Hill Industrial and Schofields. These releases will provide land for 35,000 new dwellings and 200 hectares of employment land.

Nov 2009	Commonwealth and NSW Governments agree to strategically assess the Growth Centres Program under the EPBC Act.
Nov - Dec 2009	Terms of Reference for the EPBC Act strategic assessment released for public comment. Submissions were received and considered in the preparation of the final Terms of Reference. The Draft Recovery Plan for the Cumberland Plain was also exhibited from November to December 2009. 36 submissions were received.

A key component of precinct planning in the Growth Centres is communication and consultation with the community and relevant stakeholders. The purpose of community engagement has been to inform, as well as to seek feedback and input on key issues. As outlined in Table 2, since 2004, there have been a number of formal public exhibitions relating to detailed precinct planning and broader strategic planning matters such as Biodiversity Certification for the North West and South West Growth Centre.

The number and variety of consultations and exhibitions relating to precinct planning and biodiversity conservation in the Growth Centres means that there is a high level of awareness and interest across the community and stakeholders.

2.3 ELEMENTS OF THE PROGRAM

The Program Report describes the Program in relation to:

- a) Program elements within the Growth Centres; and
- b) the biodiversity offsets package.

2.3.1 PROGRAM ELEMENTS WITHIN THE GROWTH CENTRES

Within the Growth Centres, the Program comprises of three broad elements:

- urban development (encompassing both residential and employment lands);
- protected areas; and
- infrastructure.

URBAN DEVELOPMENT

The combined area of the North West and South West Growth Centres will provide residential and employment lands for a population of around 500,000 people. This will include approximately 181,000 dwellings at a range of dwelling densities providing housing choice for the future residents of Western Sydney.

The Program includes plans for “walkable neighbourhoods” ensuring the centre is generally within about 400 metres (a five minute walk) from the edge of the neighbourhood. This will provide unique and favourable access to retail, service and community centres, which will assist the development of strong, cohesive communities in an efficient and timely manner.

The key principles around urban development within the Growth Centres are:

- better public transport with frequent buses that link into the rail system;

- new urban areas connected with Sydney's rail system via the existing Richmond line, the South West Rail Link and proposed North West Rail Link;
- a range of housing types and densities to suit the needs of all members of the community;
- streets and suburbs planned so that residents can walk to shops for their daily needs;
- easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops;
- environmentally friendly homes that conform to BASIX (the NSW Government's Building Sustainability Index) requirements for water and energy savings;
- jobs available locally and within the region, reducing the demand for transport services into Sydney's CBD and cutting travel times;
- a range of land uses to provide the right mix of houses, jobs, services, open and recreational spaces; and
- protection of natural and cultural heritage values, waterways and conservation of biodiversity.

PROTECTED AREAS

Both the North West and South West Growth Centres contain areas of important biodiversity value. As many areas within the Growth Centres are degraded and fragmented, the Program provides for the protection of the areas of highest conservation value in the Growth Centres.

In total within the Growth Centres, the Program will retain and protect a minimum of 2,000 ha of existing native vegetation, which includes a minimum of 1,000 ha of zoned conservation areas to be acquired by the NSW Government.

INFRASTRUCTURE

Both the North West and South West Growth Centres will require significant investment in the upgrade and construction of infrastructure, including roads, rail, education, health, emergency and justice services. The NSW Government will provide a substantial funding contribution to ensure that infrastructure is provided efficiently and coordinated with urban development.

Key elements of the infrastructure component of the Program are:

- Transport: upgrade and construction of new roads, rail and bus networks to provide efficient transport links.
- Health: improvements to existing hospitals and the construction of new community and health centres.
- Education: development of primary schools, high schools and TAFE facilities to service the new communities.
- Emergency services: provision of police, ambulance and fire stations as communities grow.
- Water, sewerage, and recycled water: integration of water and sewerage schemes.
- Local facilities: provision of local parks, community centres, libraries and sports fields.

THE NORTH WEST GROWTH CENTRE

The North West Growth Centre is approximately 10,000 ha in size and is located within the boundaries of Blacktown, Hawkesbury and Hills Shire local government areas. The Growth Centre is adjacent to

Rouse Hill Major Centre and is serviced by the existing Richmond rail line that has three stations within the Growth Centre. The boundaries of the North West Growth Centre are shown in Figure 2.

The North West Growth Centre is made up of 16 precincts and has an estimated dwelling yield of approximately 70,000 dwellings.

The development of these precincts will be generally in accordance with the North West Structure Plan (see Figure 3) which guides the location of town centres, neighbourhood centres, industrial and conservation lands.

The indicative layout for the development and protected areas for the North West Growth Centre is shown in Figure 4. These boundaries are indicative as boundary changes may occur during the more detailed planning processes.

The development areas provide for residential and employment lands and related infrastructure, but will also include areas of open space.

The protected areas under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP) are comprised of:

- Flood prone lands - Vegetation on these lands is protected through the vegetation clearing development controls in the Growth Centres SEPP. Limited development may occur in these areas, however any loss of vegetation is required to be offset, in accordance with the Growth Centres Biodiversity Certification.
- Three types of conservation areas that have been rezoned through the SEPP. These areas will be brought into public ownership overtime and be managed for conservation or recreation. Development in these areas is restricted and native vegetation on these lands is to be retained and protected. The areas include:
 - o Environmental conservation areas which have the main objective of protecting and restoring areas with ecological, scientific or aesthetic value.
 - o Public recreation - regional areas which have the joint objectives of protecting natural and heritage values of the land, as well as allowing sympathetic recreational uses.
 - o Public recreation - local areas which have the joint objectives of protecting natural and heritage values of the land, as well as allowing sympathetic recreational uses.

There are also a range of existing protected areas within the North West Growth Centre that provide for the protection of native vegetation. These are shown on Figure 4.

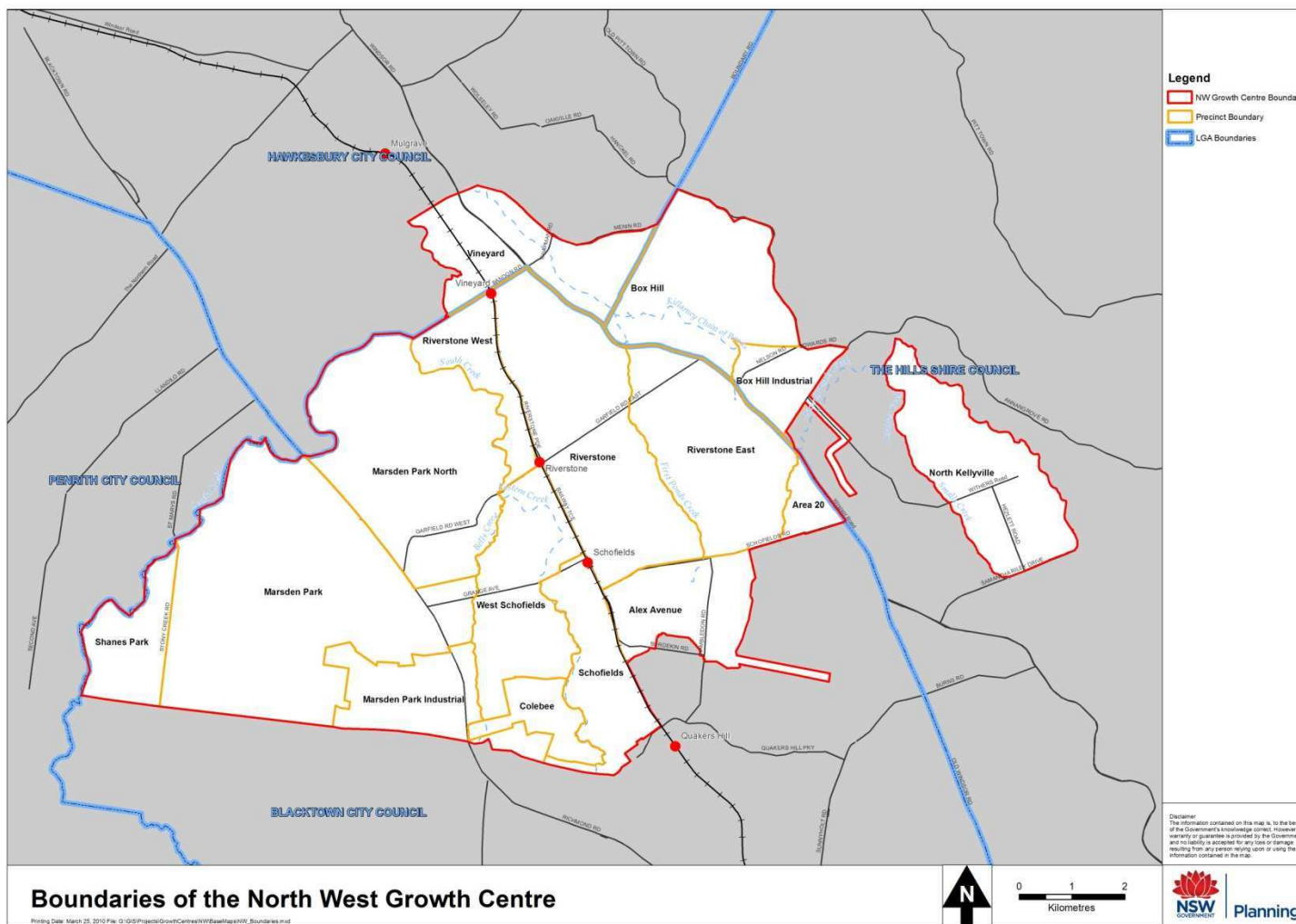


Figure 2: Boundaries of the North West Growth Centre

NORTH WEST GROWTH CENTRE STRUCTURE PLAN (EDITION 3)

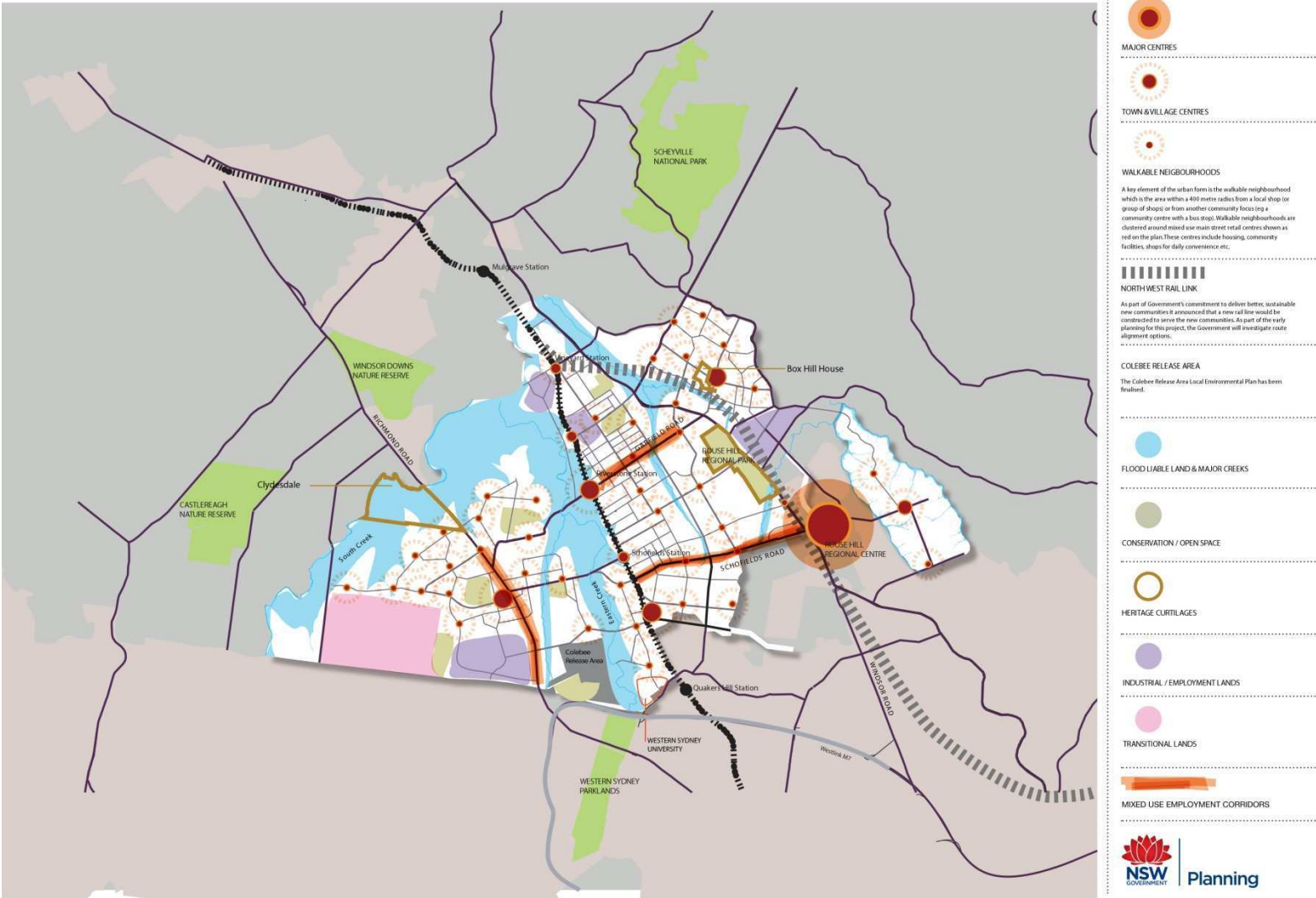


Figure 3: North West Growth Centre Structure Plan

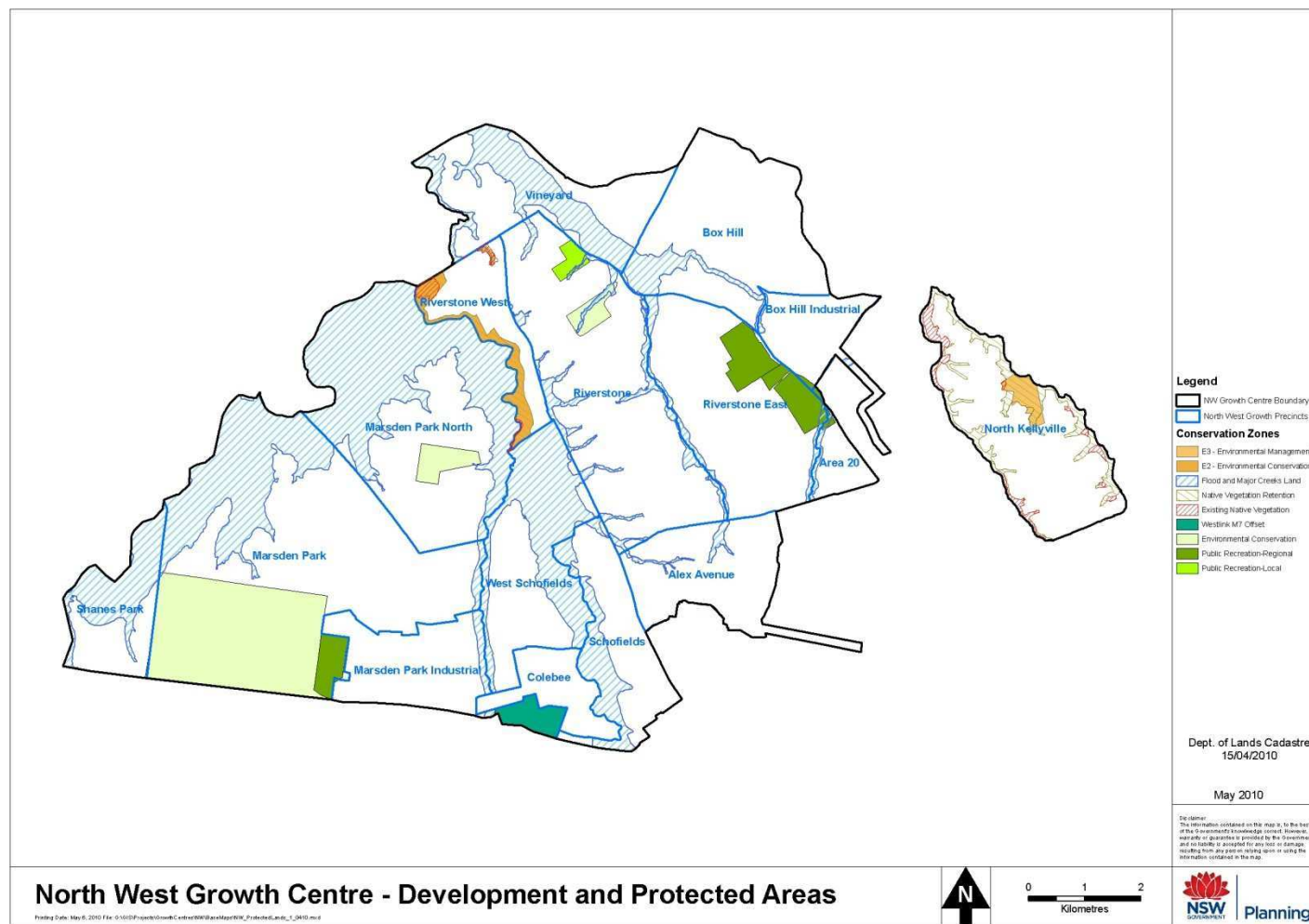


Figure 4: Indicative layout of development and non-development areas within the North West Growth Centre

SOUTH WEST GROWTH CENTRE

The South West Growth Centre is within the boundaries of Liverpool, Camden and Campbelltown local government areas. It is approximately 17,000 ha in size, will focus on the Major Centre of Leppington, and the South West Rail Link will provide key public transport service connecting the Growth Centre and Sydney. The boundaries of the South West Growth Centre are shown in

Figure 5.

The South West Growth Centres is made up of 18 precincts and has an estimated dwelling capacity of 110,000 dwellings. The development of these precincts will be generally in accordance with the South West Structure Plan (see

Figure 6) which guides the location of town centres, neighbourhood centres, industrial and conservation lands.

The indicative layout for the development and protected areas for the South West Growth Centre is shown in Figure 7. These boundaries are indicative as boundary changes may occur following detailed planning processes.

The development areas provide for residential and employment lands and related infrastructure, but will also include areas of open space.

The protected areas under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP) are comprised of:

- Flood prone lands. Vegetation on these lands is protected through the vegetation clearing development controls in the Growth Centres SEPP. Limited development may occur in these areas, however any loss of vegetation is required to be offset, in accordance with the Growth Centres Biodiversity Certification.
- One type of conservation area that has been rezoned through the Growth Centres SEPP Public recreation – regional. This applies to three areas within the South West. These areas will be brought into public ownership overtime and be managed for conservation and recreation purposes. They have the joint objectives of protecting natural and heritage values of the land, as well as allowing sympathetic recreational uses. Development in these areas is limited and native vegetation on these lands is to be retained and protected.

There are also a range of existing protected areas within the South West Growth Centre that provide for the protection of native vegetation. These are shown on Figure 7.

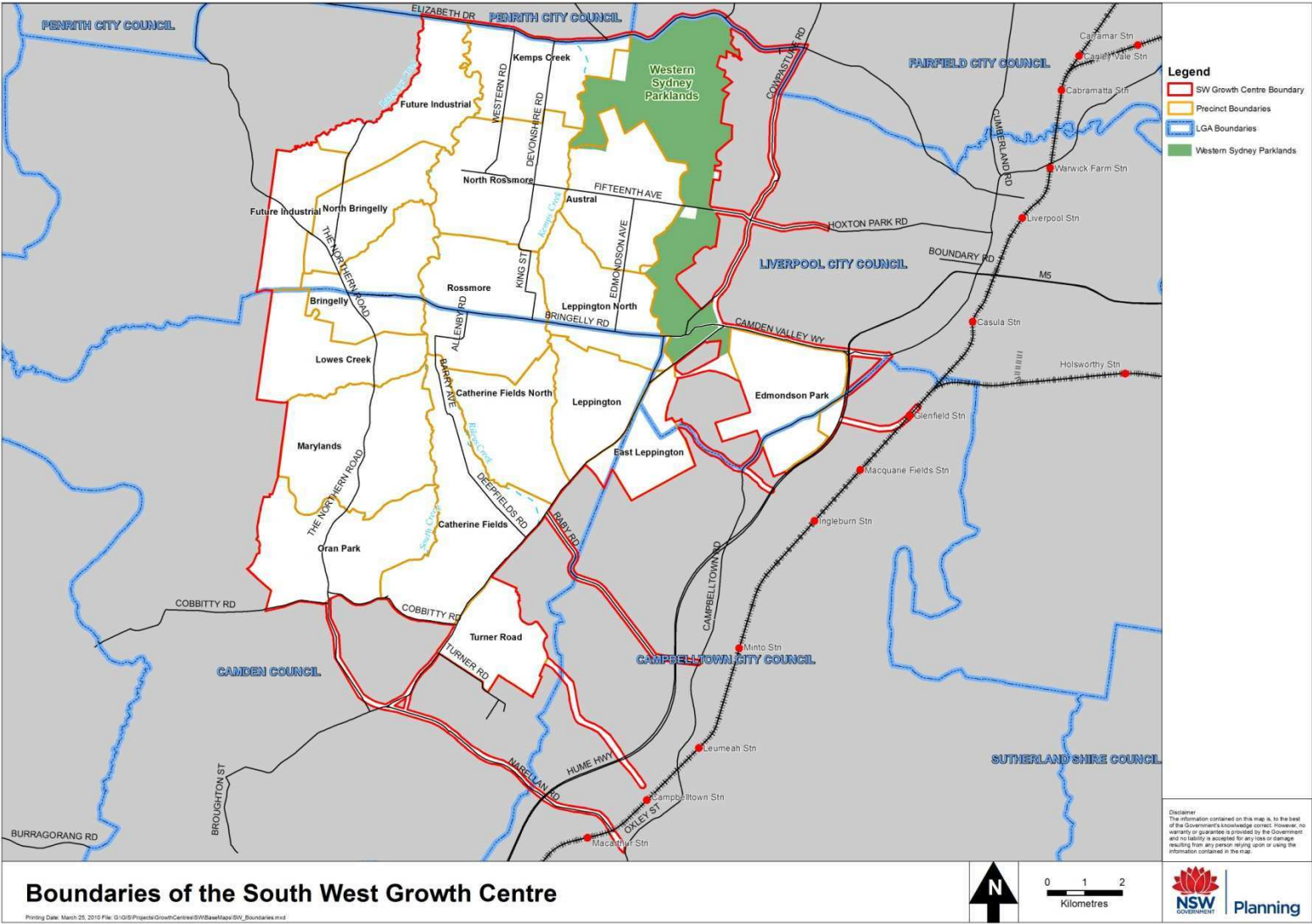


Figure 5: Boundaries of the South West Growth Centre

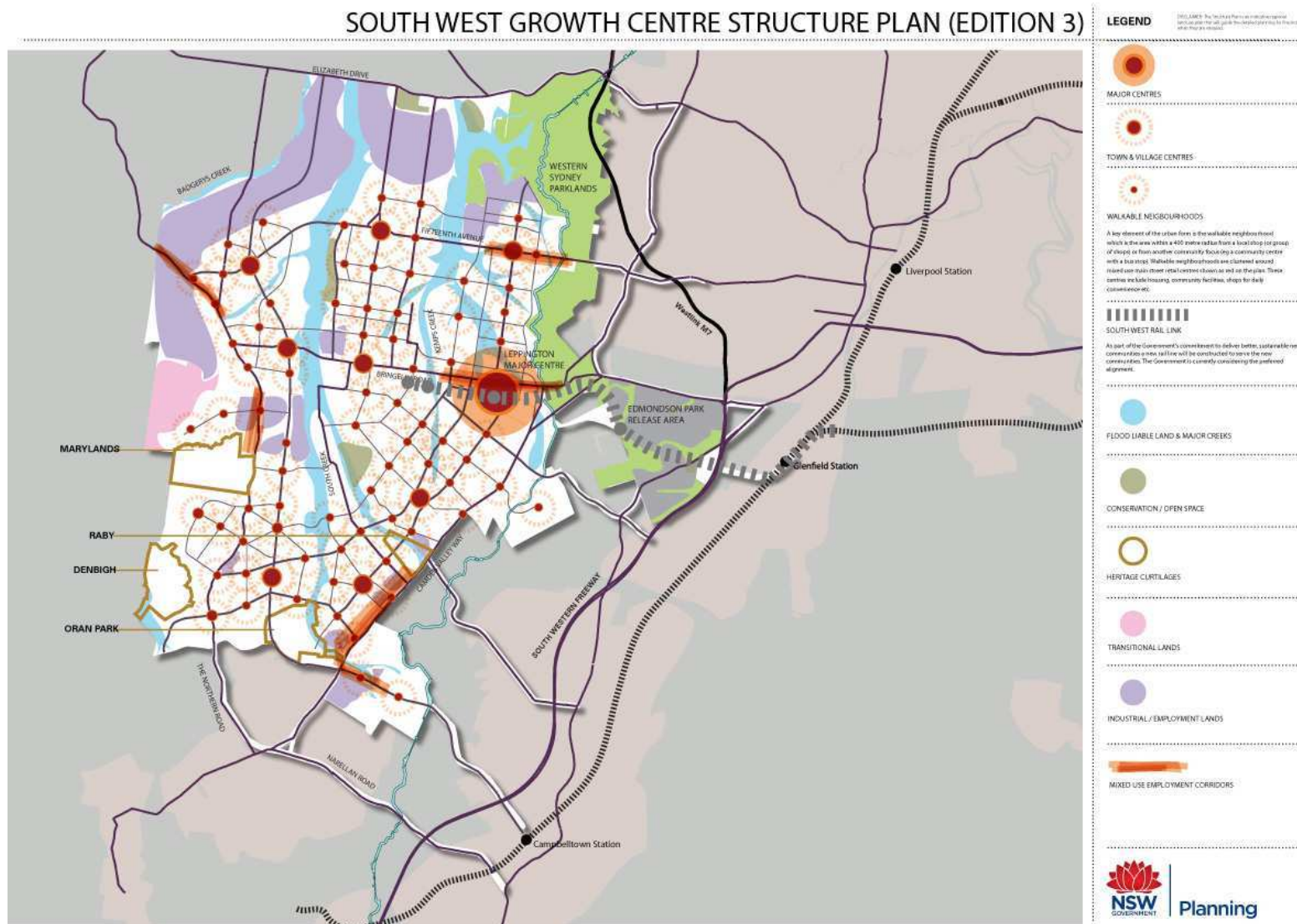


Figure 6: South West Growth Centre Structure Plan

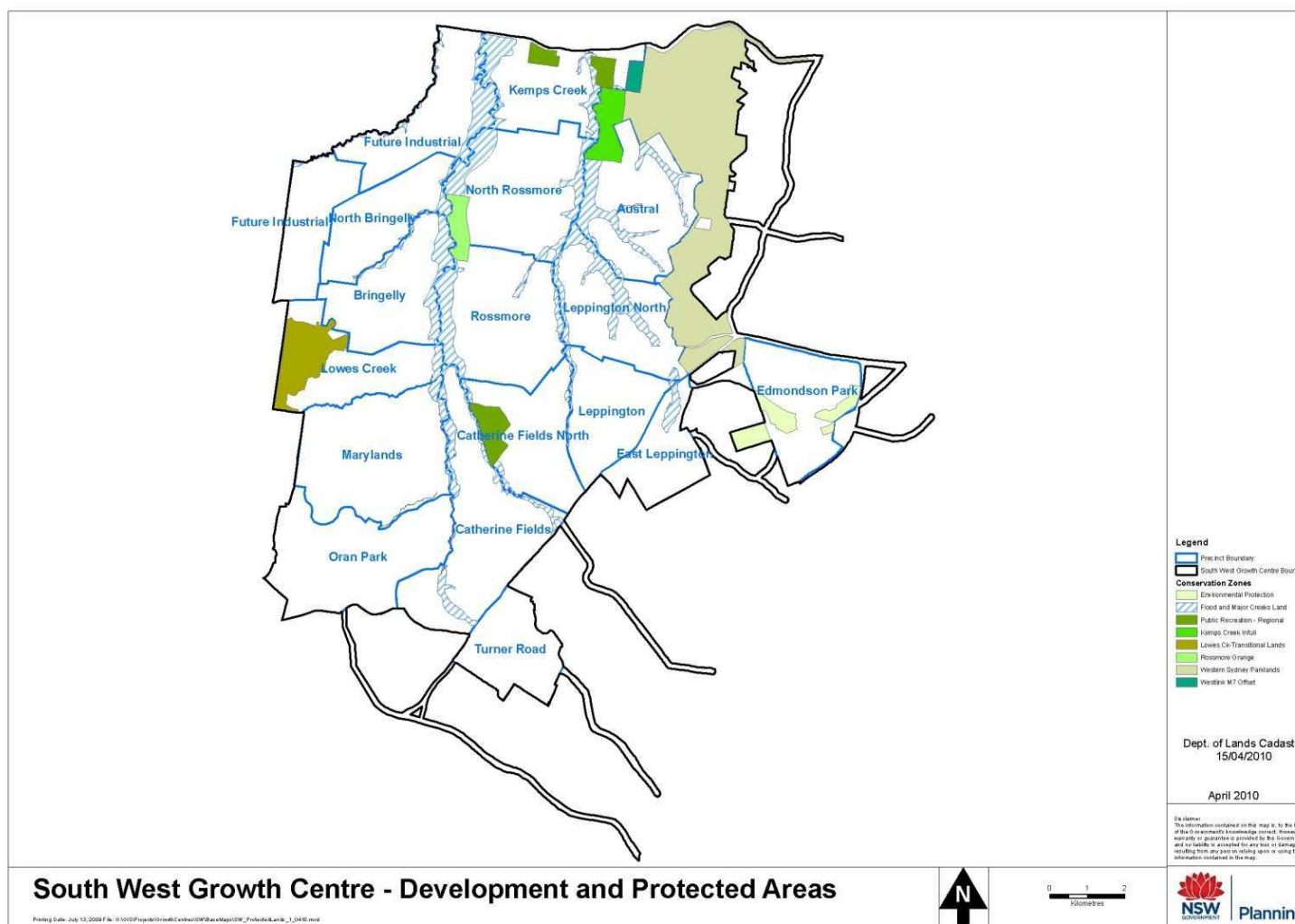


Figure 7: Indicative layout of development and non-development areas within the South West Growth Centre

2.3.2 BIODIVERSITY OFFSETS PACKAGE

The Program provides for a \$530 million biodiversity offsets package to protect high conservation value areas both *within and outside* the Growth Centres. 25% of this money will be spent acquiring conservation areas within the Growth Centres and 75% will be spent acquiring high quality vegetation remnants with similar ecological values outside the Growth Centres.

In addition to the \$530 million, some of the conservation areas within the North West Growth Centre are being purchased using other NSW Government revenue and by the local council.

CONSERVATION AREAS WITHIN THE GROWTH CENTRES

The conservation areas to be purchased within the Growth Centres are shown in Figure 4 and Figure 7 and are zoned as:

- Environmental conservation;
- Public recreation – regional; and
- Public recreation – local.

These areas cover a minimum of 1,000 ha and represent the highest quality vegetation within the Growth Centres.

There are a range of processes to acquire the land (detailed in Section 4 of the Program Report) and all areas are protected from vegetation clearing through development controls and will be managed in the long term for conservation.

In addition to these areas there are lands within the Growth Centres that are currently in public ownership or have been identified for acquisition. These areas include areas such as Rossmore Grange, Kemps Creek Nature Reserve, and the Western Sydney Parklands. These areas are in public ownership and are managed by NSW Government or local councils to meet conservation and recreation objectives.

CONSERVATION AREAS OUTSIDE OF THE GROWTH CENTRES

The Program provides for the establishment of additional conservation areas, with similar ecological values, throughout the Cumberland Plain, the Hawkesbury Nepean Catchment and the Sydney Basin (see Figure 8). The Program will provide 75% of the overall conservation fund (\$397.5 million in 2005/06 dollars) over 30+ years for the securing of offset lands of high conservation value with similar ecological values within these areas. This will be delivered through the Growth Centres Offset Program.

As a first preference, the funds will be invested within the priority areas on the Cumberland Plain identified in the Hawkesbury Nepean Catchment Action Plan (2008). The priority areas within the Cumberland Plain were identified by DECCW as lands that could most effectively be managed for threatened biodiversity (Figure 9). They represent the best remaining opportunities in the region to maximise long term biodiversity benefits for the lowest possible cost, including the least likelihood of restricting land supply. DECCW considers the remnant vegetation within these lands to be the highest priority for future recovery efforts for the threatened biodiversity of the Cumberland Plain.

Criteria for guiding the spending of annual funding within this area include a consideration of reserve design principles, conservation values and cost effectiveness. Preference will be given to protecting the largest remnants of intact vegetation with the greatest potential for long-term retention of biodiversity values.

If no suitable, cost effective lands are available in the areas of first preference, then priority areas within the broader Hawkesbury Nepean catchment will be considered as a second preference. These areas were identified as part of the development of the Hawkesbury Nepean Catchment Action Plan and comprise a network of regional corridors and priority fauna habitats in the catchment (Figure 10).

Finally, as third and fourth preferences, funding can be spent to conserve grassy woodlands within the Hawkesbury Nepean Catchment and then the Sydney Basin respectively. Grassy woodlands are a broad group of vegetation types, including Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest that are under-represented in the State's reserve system (Figure 11).

In summary, funding will be allocated within a cascading series of preferential areas as follows:

- priority areas within the Cumberland Plain, as identified in the Hawkesbury Nepean Catchment Action Plan; then
- priority areas within the Hawkesbury Nepean catchment, as identified in the Hawkesbury Nepean Catchment Action Plan; then
- grassy woodlands within the Hawkesbury Nepean catchment; and then
- grassy woodlands within the Sydney Basin.



Figure 8: Schematic of the offset focus areas

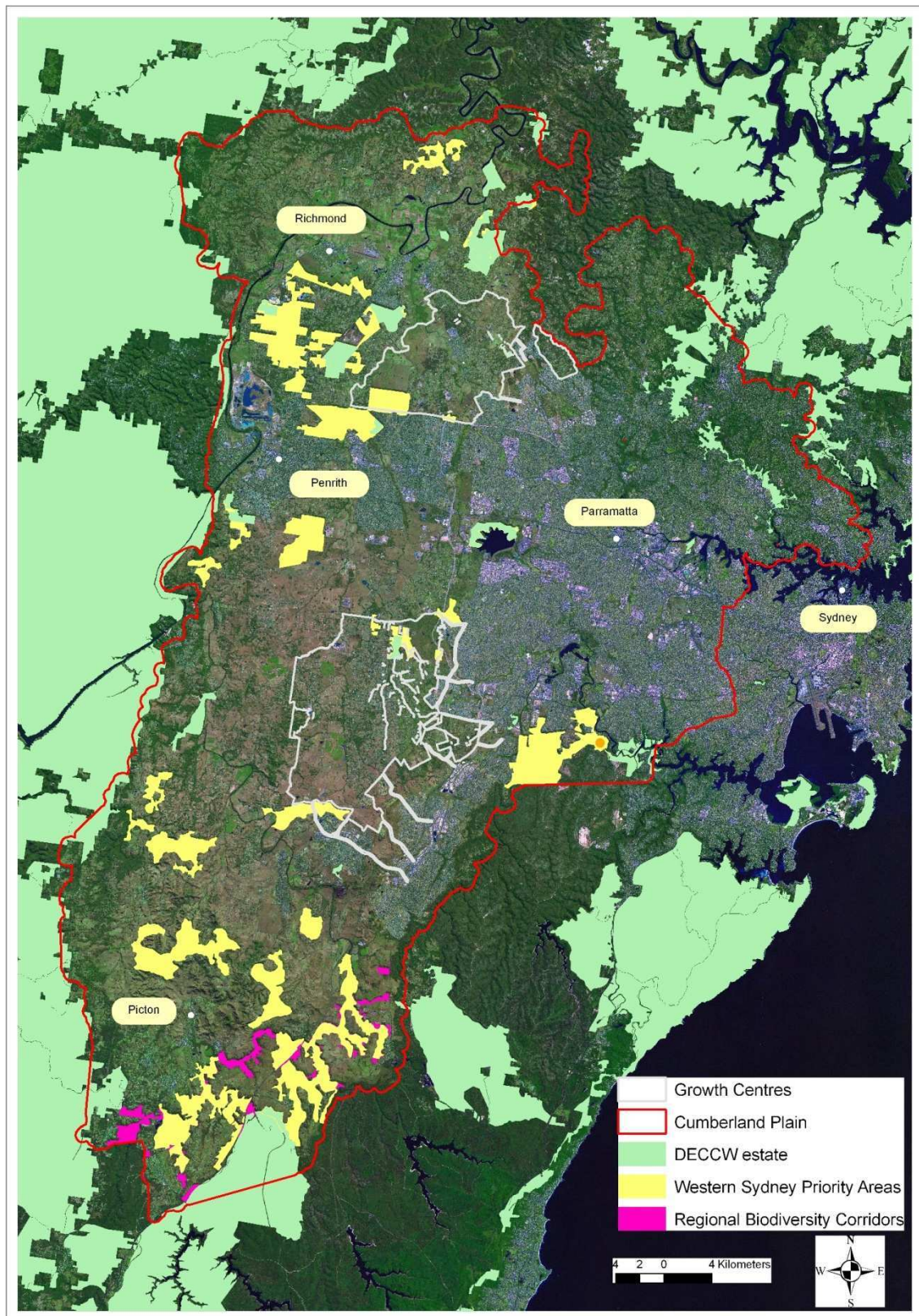


Figure 9: Priority areas within the Cumberland Plain

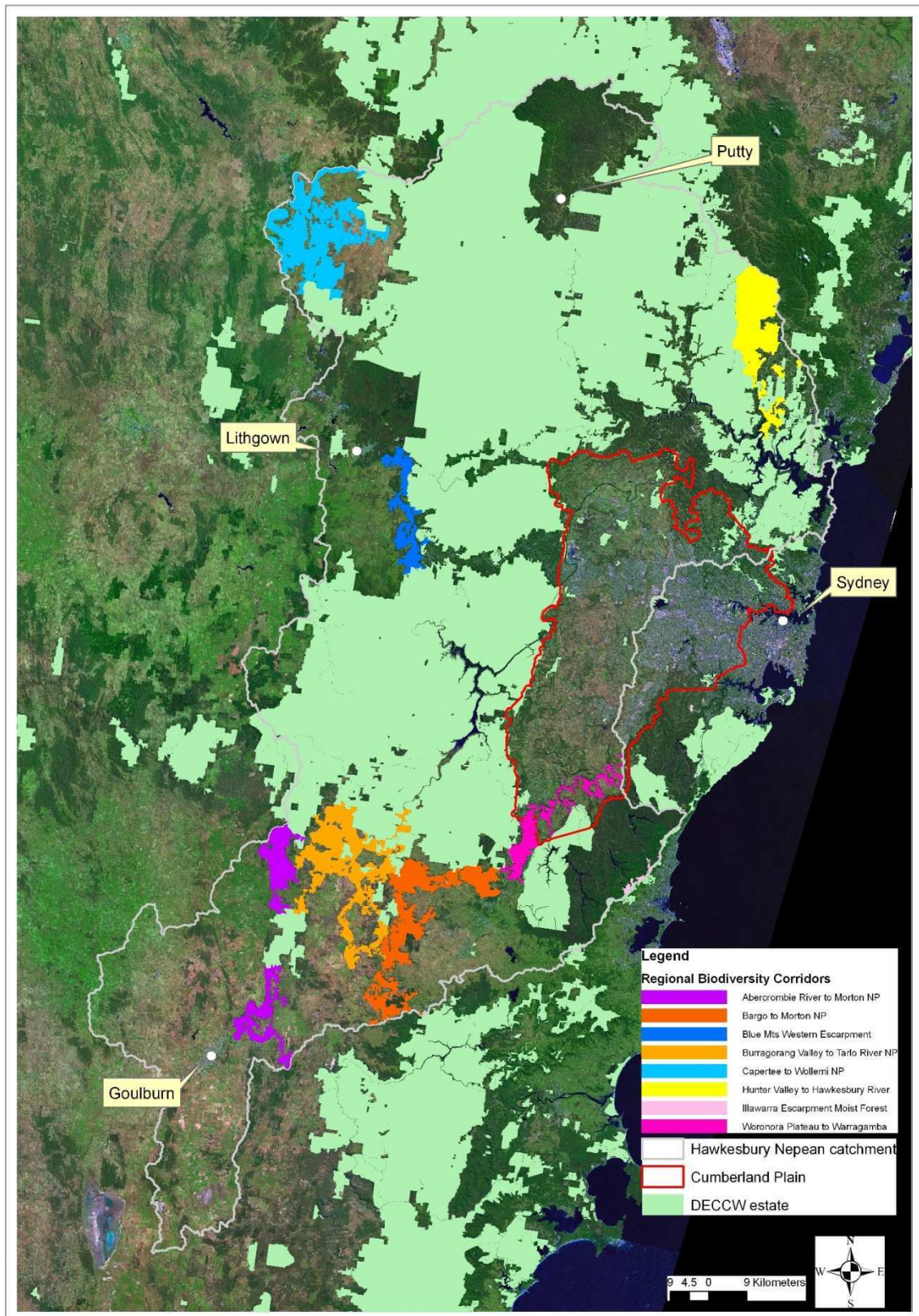


Figure 10: Second preference offset areas

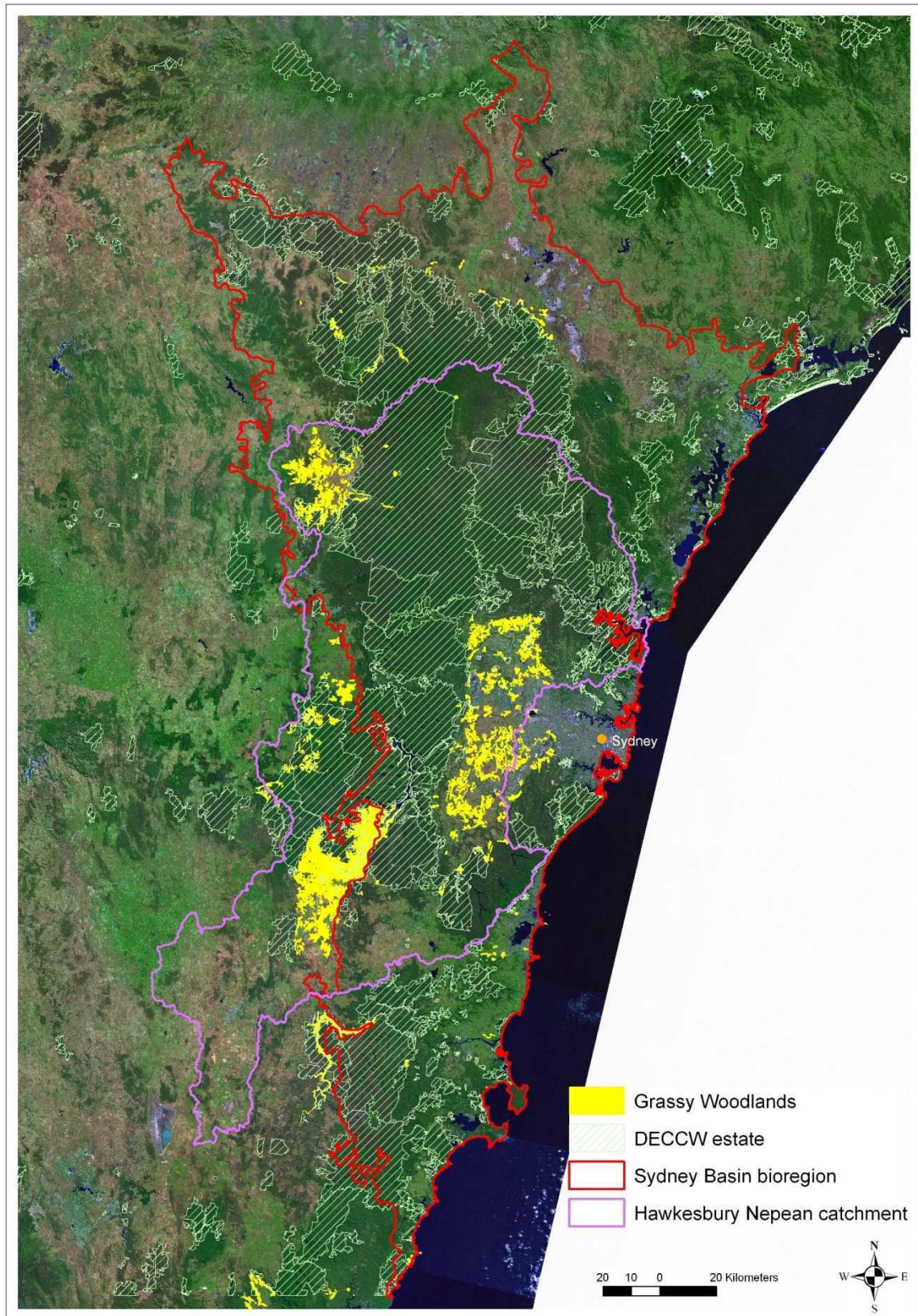


Figure 11: Grassy woodlands within and near to the Sydney Basin bioregion

2.4 MECHANISMS TO IMPLEMENT THE PROGRAM

Given the life of the Program (30+ years), the current mechanisms to implement the Program are discussed in the Program Report for background information and contextual purposes only. The Program Report notes that amendments to these mechanisms over time will not interfere with the applicability or requirements of the Program as long as those amendments do not affect the conservation activities and outcomes.

Despite this, an understanding of the current mechanisms (legislation, processes, etc) to implement the Program is critical to undertaking the strategic assessment. This Section summarises these various mechanisms.

2.5 LEGISLATIVE FRAMEWORK

2.5.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 (EP&A ACT) AND THE ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2000 (EP&A REGULATION)

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) guide planning and development in NSW.

The EP&A Act regulates the implementation and enforcement of planning powers. It establishes provisions for the making of Environmental Planning Instruments (EPIs) such as State Environmental Planning Policies (SEPP) and Local Environmental Plans (LEP), including the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP). EPIs are legal documents that regulate land use and development. The EP&A Act includes the requirements for development assessment by local government and the NSW Government and also establishes the mechanisms for the collection of development contributions at a local and state level to fund infrastructure.

The EP&A Regulation establish additional provisions that provide further guidance on the requirements of the EP&A Act. Of particular significance to planning for Sydney's Growth Centres are clause 276 which establishes provisions with respect to the release of precincts for urban development and clause 275 which requires an assessment of the consistency of certain proposed development with the relevant Growth Centre Structure Plan if a precinct is released (refer to Figure 3 and

Figure 6). The EP&A Regulations also require the Minister to arrange for the preparation of a Development Code for the purpose of providing guidelines to assist environmental planning in released precincts.

2.5.2 THREATENED SPECIES CONSERVATION ACT 1995

The NSW *Threatened Species Conservation Act 1995* (TSC Act) controls the conservation of biodiversity in NSW. The NSW TSC Act contains a prohibition against the damage of threatened species and their habitat and contains provisions to protect endangered populations and threatened ecological communities.

The NSW TSC Act establishes a threatened species assessment process which requires development proposals to consider the effect on critical habitat, threatened species, populations and ecological communities. It is under the NSW TSC Act which Biodiversity Certification is enabled. Biodiversity Certification switches off the need for a threatened species assessment, streamlining

development whilst achieving an overall improvement or maintenance in biodiversity values. Biodiversity Certification applies to the Growth Centres SEPP.

2.6 PLANNING TOOLS

The Growth Centres have a planning framework that is unique in NSW. Central to the framework is the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (the Growth Centres SEPP). The planning framework is illustrated in Figure 12 and summarised in this section.

There are also a number of other key policies, strategies, plans and legislation that will inform the detailed planning process and guide decision making at both the strategic planning and development assessment stages. The detailed planning process is called “precinct planning” as it is undertaken systematically for areas within the Growth Centres called precincts.

2.6.1 STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

The Growth Centres SEPP is an environmental planning instrument prepared under the plan making provisions in the EP&A Act. The SEPP will ultimately establish the land use zoning and development controls for all the land within the Growth Centres. Consent authorities, such as local councils, must apply the provisions and consider the objectives of the Growth Centres SEPP when they make planning decisions about land within the Growth Centres.

The SEPP as first made in 2006, zoned land for conservation and public recreation, and introduced vegetation clearing controls. As detailed precinct planning is undertaken across the Growth Centres, further areas are expected to be identified for conservation and additional controls introduced to secure conservation outcomes.

The SEPP initially zoned a number of areas as Environmental Conservation and Public Recreation (see Figure 4 and Figure 7). The SEPP identifies the NSW government and one local Council as acquisition authorities for this land in order to ensure its long-term protection.

Where a precinct has not yet been released for urban development and zoned under the Growth Centres SEPP the local planning controls contained within the relevant Council local environmental plan (LEP) apply. In addition the controls in the Growth Centres SEPP such as the vegetation clearing controls, apply to lands identified as flood prone and major creeks land and transitional land where the LEP zoning continues to apply. The Growth Centres SEPP also requires consent authorities to consider the intended future use of land as described by the Structure Plans and Explanatory Notes when assessing certain development applications within the Growth Centres to ensure development proposed to proceed in advance of precinct planning does not affect the future delivery.

Over time, as precincts are released and precinct planning is completed, land within the Growth Centres will be rezoned by making amendments to the SEPP. This will occur after the preparation of a Precinct Plan that is guided by the Growth Centres Structure Plans and the Development Code. It is expected that additional areas for conservation and recreation will be protected through the precinct planning and Growth Centres SEPP amendment process. This will be in addition to lands currently zoned for environmental conservation. For example, since the Growth Centres SEPP was gazetted in 2006, additional land in the North West Growth Centres has been zoned Public Recreation – Regional. This land will form stage two of Rouse Hill Regional Park.

The Growth Centres SEPP has also introduced development controls for flood prone land and vegetation clearing which apply to large areas of the Growth Centres. These controls apply before

precinct planning is completed and are expected to continue to apply following the amendment of the SEPP to include the precinct plan.

As outlined in Section 3 of this report, a minimum of 2,000 ha of existing native vegetation is to be retained and protected within the Growth Centres.

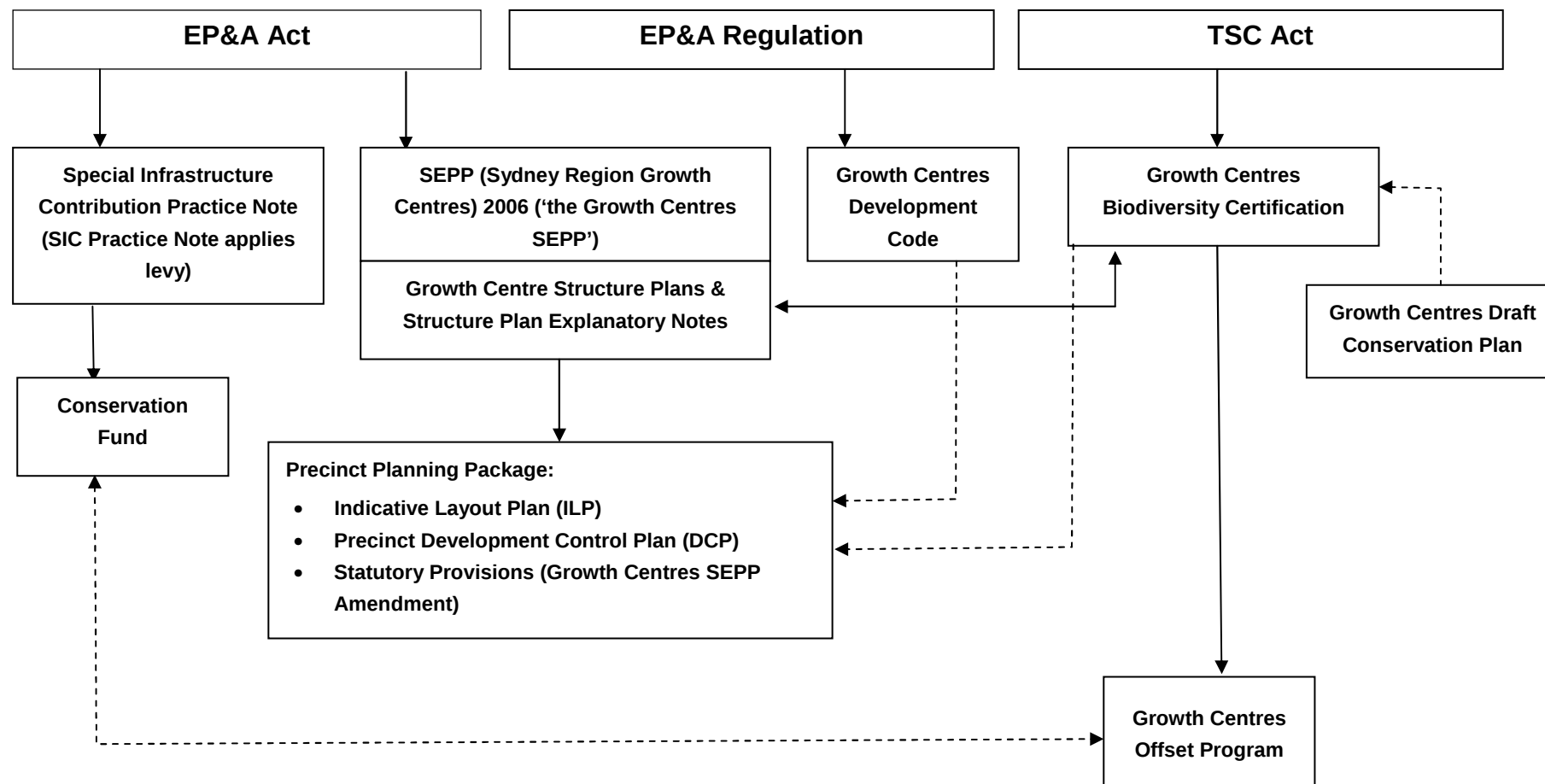


Figure 12: Planning Framework for the Growth Centres

2.6.2 CERTIFICATION OF THE SEPP

Biodiversity Certification was conferred on the Growth Centres SEPP on 14 December 2007, under the NSW TSC Act. An amendment to the NSW TSC Act was made in July 2008 to directly confer biodiversity certification on the Growth Centres SEPP under Schedule 7, Part 7 of the NSW TSC Act. The NSW Minister for the Environment may grant biodiversity certification of an environmental planning instrument if he or she is satisfied there will be an overall improvement or maintenance of biodiversity values. The Certification enables the NSW Government to be more strategic in meeting its goals for biodiversity conservation. It is a move away from site by site decisions which are made in isolation and late in the development process.

Certification removes the need to undertake threatened species assessments or prepare species impacts statements at the development application stage. Development in accordance with a certified planning instrument is taken to be development that is not likely to significantly affect any threatened species, population or ecological community, or its habitat. This upfront assessment of threatened species ensures the conservation outcomes are identified early in the planning process and streamlines the approval process for individual developments.

The Certification was informed by the Draft Growth Centres Conservation Plan (2007). The Conservation Plan identified the existing biodiversity values within the Growth Centres and proposed a suite of mechanisms to achieve positive conservation outcomes. It describes the extent and condition of native vegetation, the amount and type of vegetation being protected within the Growth Centres, the amount of vegetation loss and mechanisms to achieve an offset for this loss. The key elements of the Conservation Plan have been included in the Certification.

The Growth Centres Biodiversity Certification Order includes 41 Relevant Biodiversity Measures (RBMs) that need to be complied with in order to maintain certification. The RBMs cover a range of matters including: requirements for the retention of native vegetation; additional conservation actions which must be addressed during precinct planning; the conservation fund (timing, use, location of expenditure and delivery of funding); reporting requirements; and review. Key Relevant Biodiversity Measures include:

- retention and protection of 2,000 ha of high quality native vegetation within the Growth Centres, and
- establishment of a \$530 million Conservation Fund (in 2005/06 dollar values and subject to indexing) over a 30+ year period.

See Figure 13 and Figure 14 which illustrate the certified and non-certified lands.

As part of the preparation of the precinct plans the NSW Department of Planning must prepare and publicly exhibit an assessment of the consistency of the proposed precinct plan with the Certification. If precinct planning is inconsistent with the Certification, full justification for the inconsistency and alternative measures to ensure compliance must be provided as part of the ecological assessment for the precinct.

The Certification identifies “certified” (20,430 ha) and “non-certified” (7,329 ha) land. The non certified areas include the flood plains of major creeks, transitional lands, the Western Sydney Parklands, land zoned public recreation (local and regional) and environmental conservation and areas where further investigation is required as part of the precinct planning process. The NSW TSC Act continues to apply to land within the non certified areas and threatened species assessments are required to be undertaken in these areas.

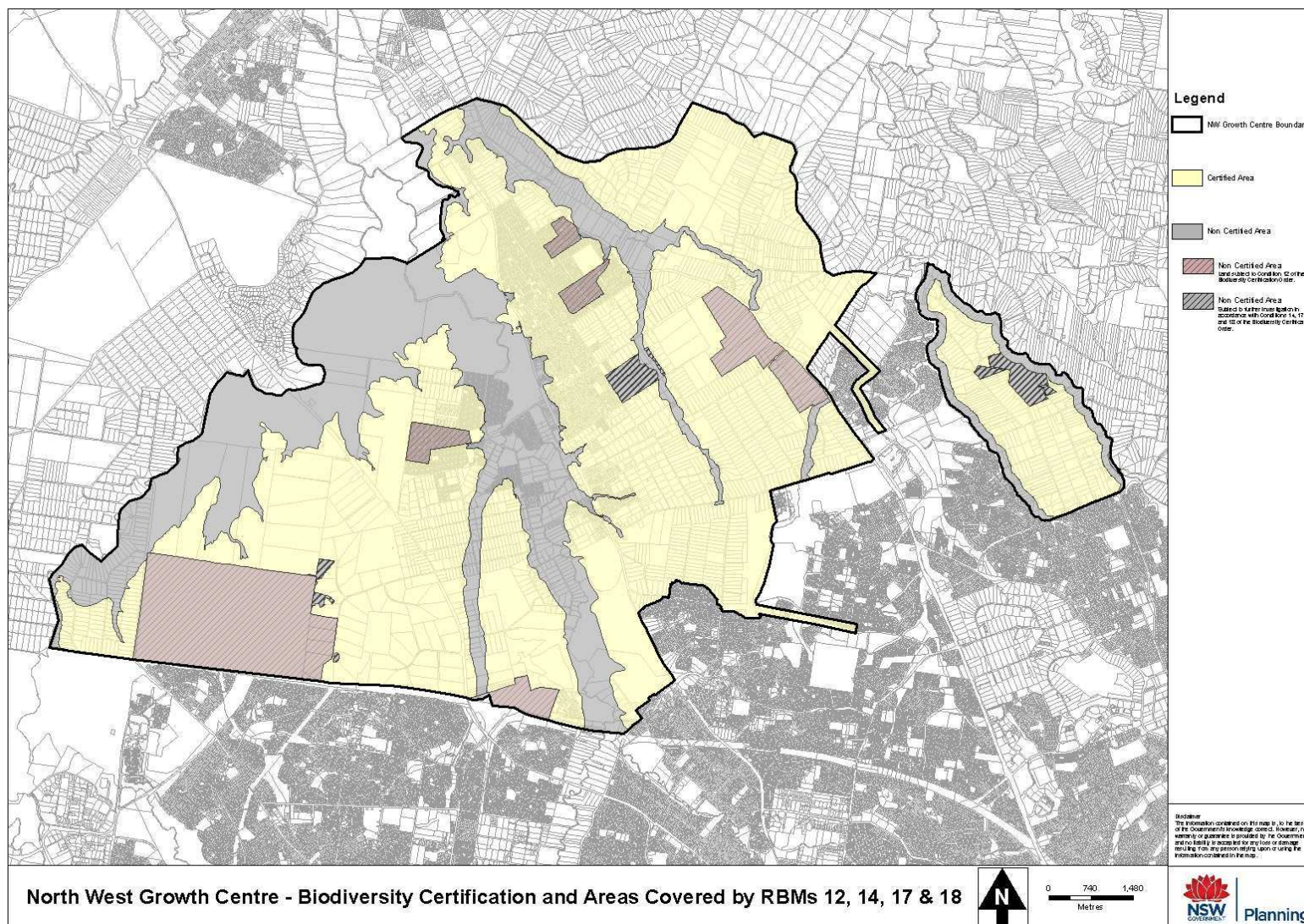


Figure 13: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18

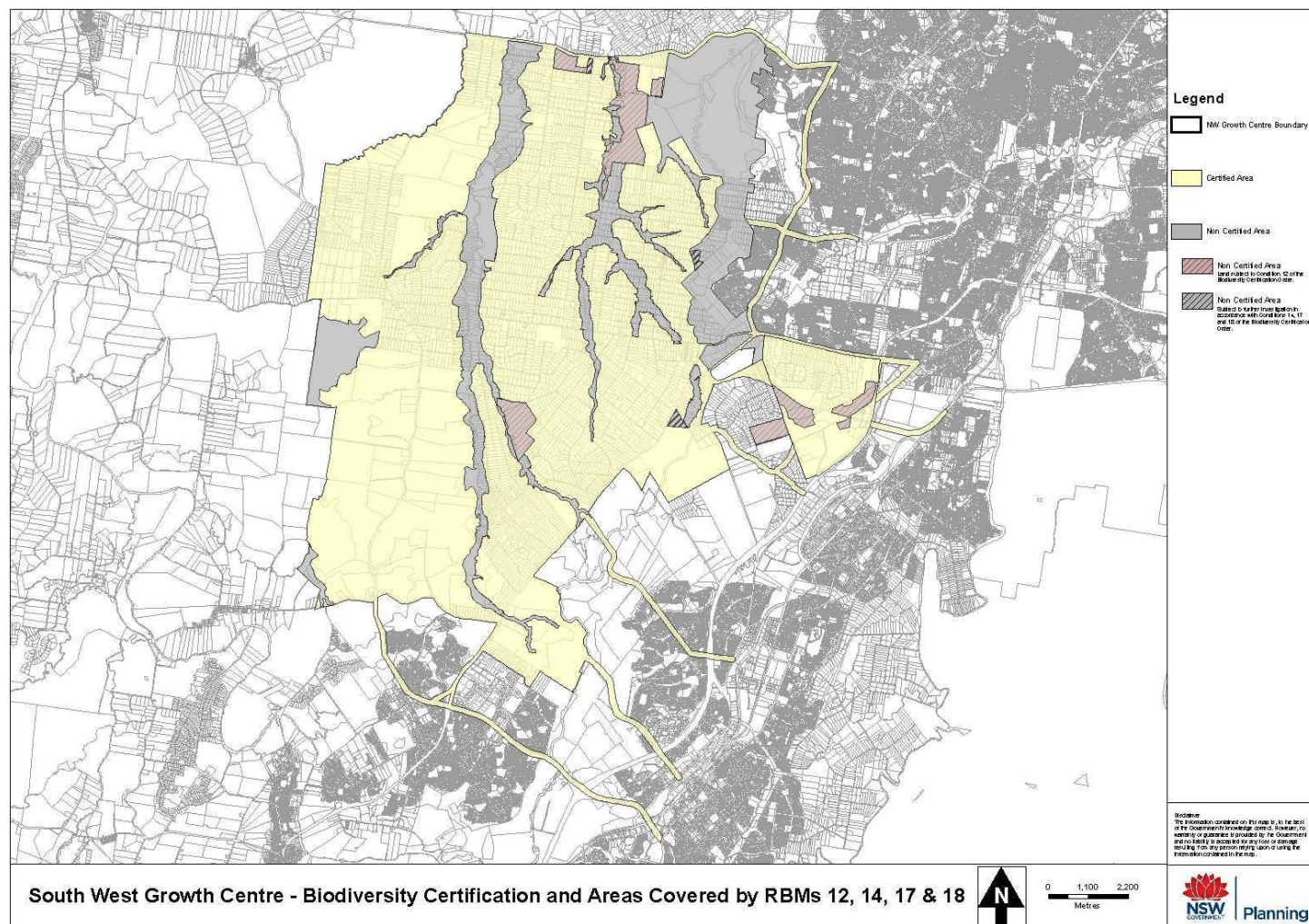


Figure 14: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18

2.6.3 STRUCTURE PLANS

Structure Plans have been prepared for both the North West and South West Growth Centres which form part of the Growth Centres SEPP (see Figure 3 and

Figure 6). The Growth Centres Structure Plans are indicative regional land use plans that will guide the detailed planning for precincts when they are released. They also establish the general pattern of development within the Growth Centres over the next 30+ years. Each Structure Plan is supplemented by explanatory notes which provide further detail on the urban outcomes expected from each precinct. The Structure Plans and the explanatory notes are the basis for the precinct planning.

Prior to the completion of precinct planning, certain development applications (those that meet one of the following criteria: capital investment of more than \$500,000, or on land with an area of more than 2 ha or for subdivision of 2 or more lots) must be accompanied by an assessment of the consistency of the proposed development with the relevant Growth Centre Structure Plan. This is a requirement of the EP&A Regulation.

2.6.4 GROWTH CENTRES DEVELOPMENT CODE

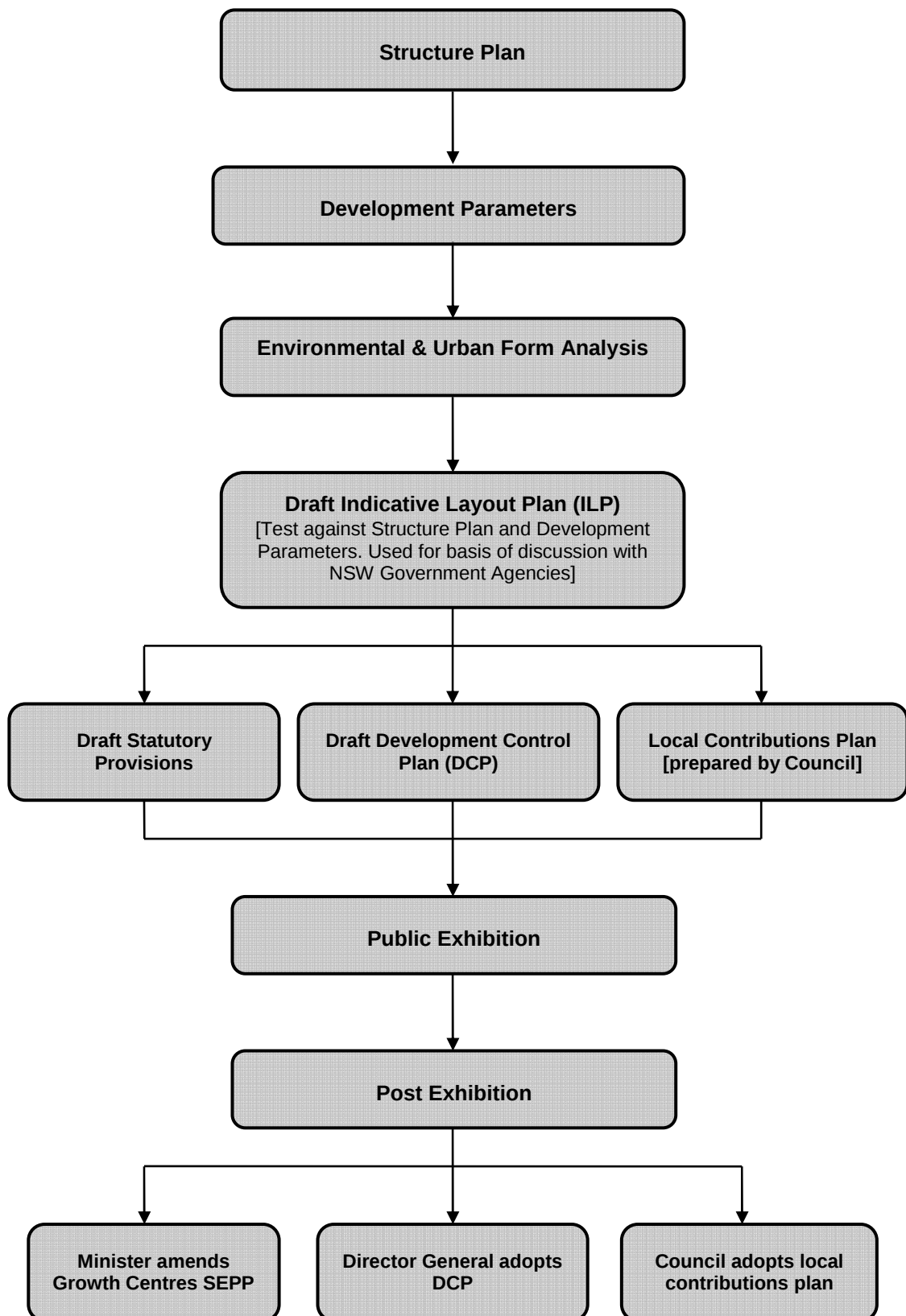
The Growth Centres Development Code is prepared in accordance with clause 276 of the EP&A Regulation. It outlines the precinct planning process and the requirements for preparing an Indicative Layout Plan (ILP) and Development Control Plan (DCP) for a precinct.

The Development Code informs and establishes environmental and urban form requirements to determine the future urban footprint of each precinct during precinct planning. The Development Code establishes policies at the regional and neighbourhood levels to promote best practice urban design by increasing housing choices, providing for employment, facilities and services at a local level and improving public transport access, maintaining the natural environment and providing, protecting and maintaining a range of open space opportunities throughout a precinct.

The primary purpose of the Development Code is to provide a guide for NSW Government, local councils, planners, architects, developers and other practitioners involved in developing the precinct planning package.

2.6.5 PRECINCT PLANNING

Precinct planning is the detailed process that analyses the urban potential and environmental outcomes of each precinct and delivers a planning outcome through a comprehensive package of planning controls. This approach facilitates the efficient and streamlined delivery of land for urban development and provides for better outcomes through a strategic and coordinated approach to issues. Precinct planning is the key to getting land to the market as quickly and sustainably as possible, with the best use of Government resources. Figure 15 provides a flow diagram of the precinct planning process.

**Figure 15:** Flow diagram of Precinct Planning

2.6.6 SPECIAL INFRASTRUCTURE CONTRIBUTION (SIC)

A Special Infrastructure Contribution (SIC) applies to development within the North West and South West Growth Centres to contribute to the funding of infrastructure in the Growth Centres.

Sections 94ED to 94EM of the EP&A Act enable the collection of a SIC as a contribution towards the funding of regional infrastructure. The NSW Minister for Planning has declared that a SIC will apply to development within the Growth Centres.

The contribution is calculated and collected in accordance with the Special Infrastructure Contribution Practice Note. A copy is available on the Sydney Growth Centres website at <http://www.growthcentres.nsw.gov.au/sic-69.html>. It is based on the anticipated need for and cost of infrastructure. The types of infrastructure include: education; roads; emergency services and justice; health services; and conservation lands. The contribution applies to developable lands within the Growth Centres resulting in the costs of regional infrastructure, including conservation, being equitably shared across the Growth Centres.

2.6.7 OTHER POLICIES APPLYING TO THE GROWTH CENTRES

In addition to the planning framework described above, a number of other statutory and non statutory policies apply to the Growth Centres (see the Draft Program Report for details). These policies apply at different stages in the development process, including strategic planning, development assessment and construction phases.

2.6.8 BIODIVERSITY OFFSET PROGRAM

The Growth Centres Biodiversity Offset Program (Offset Program) was established as part of a package of conservation measures, delivered by the NSW Government, to offset the impacts on biodiversity that will occur as the Growth Centres are developed.

The primary goals of the Offset Program are to:

- purchase land for new reserves, and
- establish biobanking agreements over lands outside the Growth Centres for the primary purpose of biodiversity conservation.

The implementation of the Offset Program will help to ensure that the development of the Growth Centres achieves an overall improvement or maintenance of biodiversity values. This will enable the certification of the Growth Centres SEPP to continue operation, thus providing certainty for both future development and conservation outcomes.

The Growth Centres Biodiversity Certification established the Conservation Fund through the Special Infrastructure Contribution applying to development within the Growth Centres. Of the \$530 million in conservation funding:

- \$132.5 million (25%, in 2005/06 dollars) will be spent within the Growth Centres to purchase areas of land identified in the Growth Centres SEPP.
- \$397.5 million (75%, in 2005/06 dollars) of the funding will be spent outside the Growth Centres, targeting the largest and best vegetation remnants with similar ecological values, for reservation or conservation agreements

The Growth Centres Offset Program is implemented through the Conservation Fund.

The governance arrangements for the Offset Program are shown in Figure 16. NSW Treasury administers the Growth Centres Conservation Funds which are derived (in part) from developer contributions through the SIC. The NSW Environmental Trust then allocates funding for DECCW to manage. DECCW has accepted this role because of its expertise in identifying land of conservation value and because of its statutory responsibilities in reserve acquisitions and the establishment of biobanking agreements.

The priorities for the allocation of the offset funding outside of the Growth Centres are illustrated in Figure 8. In summary, funding will be allocated within a cascading series of preferential areas as follows:

- priority areas within the Cumberland Plain, as identified in the Hawkesbury Nepean Catchment Action Plan; then
- priority areas within the Hawkesbury Nepean catchment, as identified in the Hawkesbury Nepean Catchment Action Plan; then
- grassy woodlands within the Hawkesbury Nepean catchment; and then
- grassy woodlands within the Sydney Basin.

Two of the key criteria for consideration of expending the money are the availability of land and cost effectiveness. Cost effectiveness is defined in the RBMs as, *“a consideration of the conservation objectives that would be achieved by purchasing or entering into a conservation agreement for a parcel of land and the cost of the purchase and/or conservation agreement, relative to the cost of achieving the same or similar conservation objectives on other parcels of land within the Sydney Basin.”*

- The RBMs also outline the criteria for the land to be purchased within these preferential areas which are:
- *“large remnants of intact native vegetation with the greatest potential for retaining biodiversity values over time;*
- *vegetation communities that are under-represented in the protected area network;*
- *areas of equivalent or better conservation value to that which are to be cleared within the Growth Centres;*
- *areas that contain habitat for threatened species, including but not limited to species to be affected by development of the Growth Centres;*
- *areas that have the highest cost effectiveness;*
- *conservation reserve design principles, such as size, boundary configuration and landscape context;*
- *previous land uses;*
- *likely threats (such as existing or future adjoining land uses); and*
- *availability (including the willingness of landowners to either sell land or place it under a conservation agreement). For the purpose of clarification, no land is intended to be compulsory acquired in order to meet any of the conditions of biodiversity certification.”*

PRIORITY CONSERVATION LANDS

As discussed previously, the priority lands within the Cumberland Plain were identified by DECCW as lands that could most effectively be managed for threatened biodiversity (Figure 9). They represent the best remaining opportunities in the region to maximise long term biodiversity benefits for the lowest possible cost, including the least likelihood of restricting land supply. DECCW considers these lands, which cover approximately 26,000 ha, to be the highest priority for future recovery efforts for the threatened biodiversity of the Cumberland Plain.

To identify the priority lands, DECCW undertook an “assessment to identify the lands on the Cumberland Plain that could most effectively be managed for threatened biodiversity. These ‘priority conservation lands’ represent the best remaining opportunities to secure long-term biodiversity benefits in the region at the lowest possible cost, including the least likelihood of restricting land supply’ (DECC 2008a).

The priority conservation lands are an updated version of the Western Sydney Priority Areas identified in the Hawkesbury Nepean Catchment Action Plan (2008). They differ slightly in that additional areas were included in the priority conservation lands to meet threatened flora targets for the Draft Cumberland Plain Recovery Plan. Modifications were also made to: ensure consistency with land-use planning decisions by removing areas identified for development, and exclude areas where recent remote imagery indicated that conservation values had been significantly diminished through disturbance.

The identified priority conservation lands comprise 25,566 ha and are located in seven broad “candidate areas” i.e. Castlereagh, Wilberforce, Mulgoa, Hoxton, Holsworthy, Razorback and Nepean.

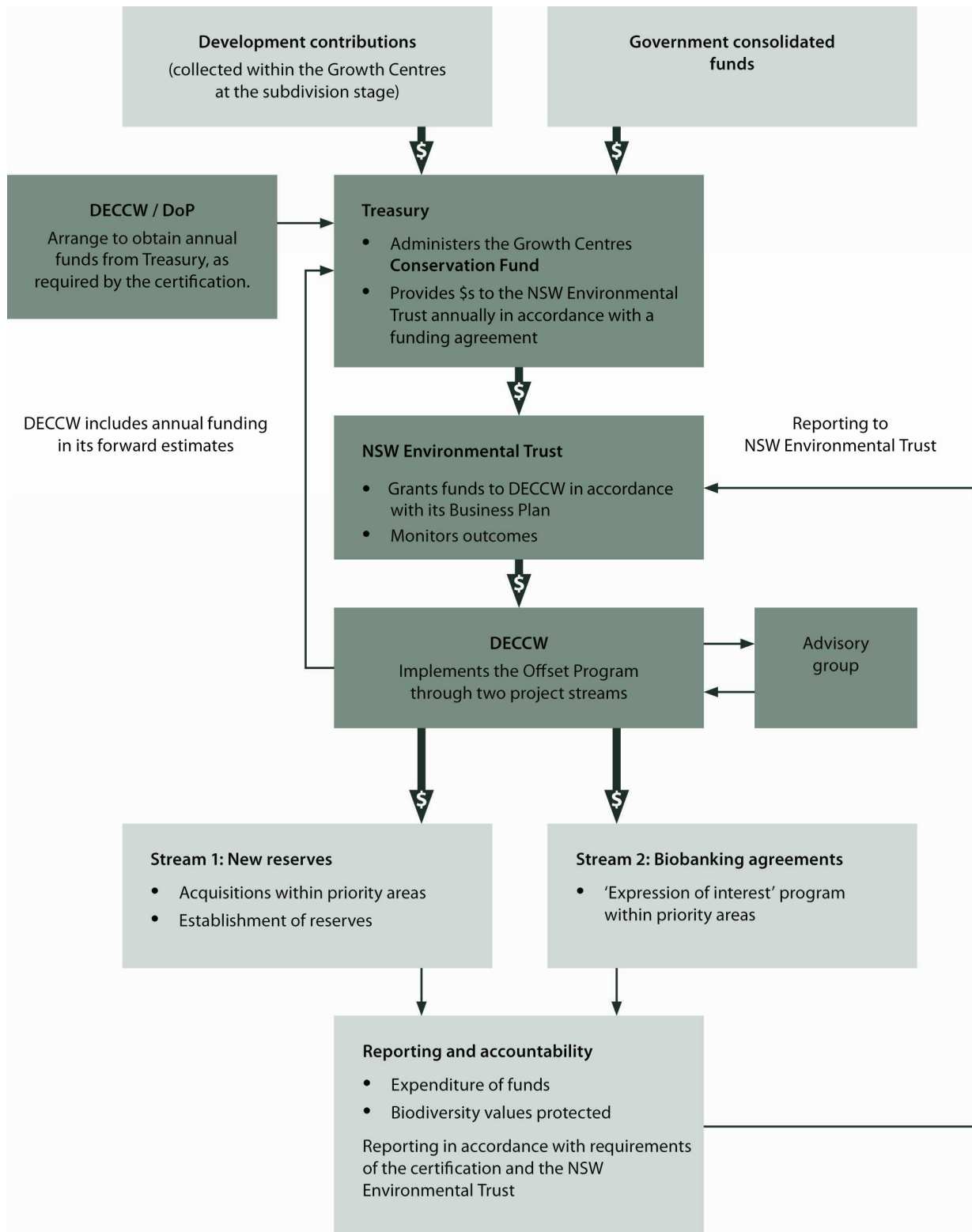


Figure 16: Administration of offset funds and program structure

2.7 MITIGATION AND MANAGEMENT MEASURES WITHIN THE GROWTH CENTRES

There are a range of mitigation and management measures that will be employed in the implementation of the Program. These are focused on providing long term conservation outcomes within the Growth Centres and are discussed under three categories:

- management of conservation areas;
- protection and management of vegetation within other protected areas; and
- management of activities within the development areas to avoid impacts on the protected areas.

Management of conservation areas

The three categories of land zoned under the Growth Centre SEPP that will be managed specifically for conservation across the two Growth Centres are:

- Environmental conservation;
- Public recreation - regional; and
- Public recreation – local.

These areas total approximately 1,000 ha in size.

ENVIRONMENTAL CONSERVATION AREAS

There are three environmental conservation areas in the North West Growth Centre and none in the South West. The NSW Government has committed to funding the acquisition of the three areas in the North West (see Figure 4). Two areas are in the process of being purchased by the NSW Government. The third area, Shanes Park, is currently owned by the Commonwealth Government and discussions about the possible transfer of this land to the NSW Government are being held. These lands are protected for biodiversity conservation through zoning and development controls. The objectives of these areas are:

- *to protect and restore areas of special ecological, scientific or aesthetic values; and*
- *to conserve biological diversity, native vegetation corridors, aboriginal heritage or cultural values of the land, and its scenic qualities (Growth Centres SEPP).*

Relevant Biodiversity Measure 12 requires that in these areas existing native vegetation must not be cleared unless it is in accordance with a plan of management.

Final responsibility for the ongoing management of these areas has not yet been determined. Until a final decision is made responsibility will remain with the NSW Government.

The long term conservation outcome for these areas is expected to be strong. This is because:

- The objectives of these areas are to protect the environment.
- It is expected that the areas will be managed under Plans of Management. For example, it is likely that Shanes Park will be managed under the NSW *National Parks and Wildlife Act 1974* which has clear requirements around the management of protected areas.
- Both the Growth Centres SEPP and the Relevant Biodiversity Measures provide strong protection for the vegetation within these areas. For example, clearing is not permitted unless it is in accordance with a plan of management that is endorsed by DECCW.

PUBLIC RECREATION – REGIONAL AREAS

There are five public recreation – regional areas. Three in the North West Growth Centre (Figure 4) and two in the South West Growth Centre (Figure 7). These lands are protected for biodiversity conservation through zoning and development controls. In the North West, these lands include the Rouse Hill Regional Park. The NSW Government has committed to funding the acquisition of these five areas and they will be managed in accordance with the following objectives:

- *to enhance, restore and protect the natural and cultural heritage values of the land; and*
- *to enable the land to be used for regional open space or recreational purposes that are consistent with the protection of its natural and cultural heritage values (Growth Centres SEPP).*

Relevant Biodiversity Measure 12 requires that in these areas existing native vegetation must not be cleared unless it is in accordance with a plan of management.

Final responsibility for the ongoing management of these areas has not yet been determined. Until a final decision is made responsibility will remain with the NSW Government.

The long term conservation outcome for these areas is expected to be strong. This is because:

- One of the key objectives of these areas is to protect the environment.
- It is expected that the areas will be managed under Plans of Management under relevant legislation – e.g. under the NSW *National Parks and Wildlife Act 1974* or the *Local Government Act 1993* which have clear requirements around the management of protected areas.
- Both the Growth Centres SEPP and the Relevant Biodiversity Measures provide strong protection for the vegetation within these areas. For example, clearing is not permitted unless it is in accordance with a plan of management that is endorsed by DECCW.

PUBLIC RECREATION – LOCAL AREA

There is one public recreation – local area in the North West Growth Centre (Figure 4). This land is protected for biodiversity conservation through zoning and development controls. The area will be purchased by the relevant local Council and will be managed in accordance with the following objectives:

- *to enhance, restore and protect the natural and cultural heritage values of the land; and*
- *to enable the land to be used for public open space or recreational purposes that are consistent with the protection of its natural and cultural heritage values (Growth Centres SEPP).*

It is expected that responsibility for the ongoing management of the area will remain with the local Council.

Relevant Biodiversity Measure 12 requires that in this area existing native vegetation must not be cleared unless it is in accordance with a plan of management.

The long term conservation outcome for the area is expected to be strong. This is because:

- One of the key objectives of these areas is to protect the environment.
- It is expected that the area will be managed under a plan of management under the *Local Government Act 1993* which has clear requirements around the management of protected areas.

- Both the Growth Centres SEPP and the Relevant Biodiversity Measures provide strong protection for the vegetation within this area. For example, clearing is not permitted unless it is in accordance with a plan of management that is endorsed by DECCW.

Protection and management of vegetation within other protected areas

In addition to the conservation areas identified in the Growth Centres SEPP, there are a range of other areas where vegetation will be protected.

FLOOD PRONE AND MAJOR CREEKS LAND

As outlined previously, the Growth Centres SEPP identifies the flood prone and major creeks land within the Growth Centres. The SEPP introduces development controls to retain and protect existing native vegetation within these areas along important creek and riparian corridors.

The SEPP requires consent to be granted for the removal of any native vegetation from properties within the flood prone lands. Before the consent authority can approve development in these areas it must be satisfied that the proposed impact on native vegetation is minimised and any loss is compensated to avoid any net loss, as well as whether the development will adversely impact the floodplain environment and flood behaviour.

The Growth Centres SEPP also requires that the consent authority to be satisfied that:

- there is no reasonable alternative available to the disturbance of the bushland;
- as little as possible is disturbed;
- the disturbance will not increase salinity; and
- disturbed bushland will be reinstated where possible on completion of development.

In addition, further protection and enhancement of native vegetation within these areas and other creeks and riparian corridors, including determining future land uses, will be addressed during the precinct planning process. Depending on the future land use zoning (i.e. open space or drainage) these lands may need to be acquired by the relevant local Council.

REGIONAL PARK - EDMONDSON PARK PRECINCT

A Regional Park will also be established within the Edmondson Park Precinct. This area is being established to protect an area of important vegetation and will be managed by DECCW under the NSW *National Parks and Wildlife Act 1974*.

This area will be managed under a plan of management which will be informed by *Recovering Bushland on the Cumberland Plan – Best Practice Guidelines for the Management and Restoration of Bushland* (DECC 2005u) and the Statement of Interim Management Intent (SIMI). The SIMI establishes a basis to guide the long term management of the Regional Park by DECCW to enhance biodiversity values. It incorporates the following key management principles: enhance connections with the landscape; enhance existing key habitat values including the Cumberland Plain Woodlands values; provide interpretation of the significant components of the site and manage the natural/urban interface.

It is expected that the long term conservation outcome for this area will be strong because it is being established and managed for the purposes of conservation under the NSW *National Parks and Wildlife Act 1974*.

PUBLIC OPEN SPACE – EDMONDSON PARK PRECINCT

In addition to the Regional Park, land is also zoned for public open space within the Edmondson Park Precinct. These areas are located with both in the Campbelltown and Liverpool local government areas. The care, control and management rests with the relevant local council and under the *Local Government Act 1993* a plan of management must be prepared to guide the management of these areas. The plans of management will incorporate measure to retain Cumberland Plain Woodland values through the retention of trees; maintenance of the existing native understory and locating passive and active facilities cognisant of existing Cumberland Plain Woodland values. This provides strong protection for the vegetation in these areas.

E3 ENVIRONMENTAL MANAGEMENT ZONE - NORTH KELLYVILLE PRECINCT

Land within this zone will generally remain in private ownership. Any development will need to be consistent with the following objectives:

- *to protect, manage and restore areas with special, ecological, scientific, cultural or aesthetic values; and*
- *to provide for a limited range of development that does not have an adverse effect on those values.* (North Kellyville Precinct Plan)

Under the North Kellyville Precinct Plan, development within this zone must not result in the clearing of any native vegetation and must be consistent with the North Kellyville Environmental Management Plan. This provides strong protection for the vegetation in these areas.

E2 ENVIRONMENTAL CONSERVATION ZONE - RIVERSTONE WEST PRECINCT

Land within this zone will generally remain in private ownership. Any development will need to be consistent with the following objectives:

- *to protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values; and*
- *to prevent development that could destroy, damage or otherwise have an adverse effect on those values.* (Riverstone West Precinct Plan)

The Growth Centres SEPP requires the preparation of a vegetation management plan for the land within the E2 zone prior to development occurring. The vegetation management plan must address environmental values, methods for revegetation and rehabilitation, weed control, monitoring and ongoing management of the land. In addition, the vegetation management plan must include measures to control threats to remnant riparian vegetation, to increase species diversification and riparian vegetation cover and to improve resistance to future weed colonisation. This provides strong protection for the vegetation in these areas.

NORTH KELLYVILLE & RIVERSTONE WEST PRECINCTS - EXISTING NATIVE VEGETATION AREAS

Land within these areas will generally remain in private ownership. These areas include the existing native vegetation identified under the Growth Centres Biodiversity Certification. The objective for these areas is to manage existing native vegetation in accordance with the Relevant Biodiversity Measures. The controls require that the consent authority must be satisfied that any development within these areas will not result in the clearing of any native vegetation. This provides strong protection for the vegetation in these areas. These areas are generally within either the E3 or E2 zones described previously.

NORTH KELLYVILLE & RIVERSTONE WEST PRECINCTS - NATIVE VEGETATION RETENTION AREAS

Land within these areas will generally remain in private ownership. These areas include remnant native vegetation that is considered to be of conservation value, but are not identified under the Growth Centres Biodiversity Certification. The objective for these areas is to prevent the clearing of native vegetation. Prior to granting consent, the consent authority must be satisfied that the proposed impact on native vegetation is minimised and any loss is compensated to avoid any net loss. This provides strong protection for the vegetation in these areas.

WESTERN SYDNEY PARKLANDS

The Western Sydney Parklands have been identified and acquired overtime by the NSW Government to form a major regional park facility for Western Sydney. They are partially located within the South West Growth Centre. The Parklands will provide significant recreation opportunities, while also protecting significant conservation and cultural values. The Parklands extend from Blacktown to Liverpool and connect the North West and South West Growth Centre and include around 5,500 hectares of land.

KEMPS CREEK NATURE RESERVE

This reserve is located adjacent to the Western Sydney Parklands. It was established in 2003 and covers more than 120 ha. It is managed by DECCW in accordance with the *National Parks and Wildlife Act 1974*.

The NSW TSC Act continues to apply to the Parklands and threatened species assessments are required to be undertaken where development is likely to have a significant effect on threatened species. The long term conservation outcome for this area is expected to be strong. This is because:

- the land will be managed by the NSW Government for environmental conservation purposes;
- it is expected that the areas will be managed under Plans of Management under relevant legislation – e.g. under the NSW *National Parks and Wildlife Act 1974* which has clear requirements around the management of protected areas; and
- both the Growth Centres SEPP and the Relevant Biodiversity Measures provide strong protection for the vegetation within these areas. For example, under RBM 12, clearing is not permitted unless it is in accordance with a plan of management that is endorsed by DECCW.

ROSSMORE GRANGE – ROSSMORE & NORTH ROSSMORE PRECINCTS, SOUTH WEST GROWTH CENTRE

The Rossmore Grange covers 80 hectares and is zoned RE1 Public Recreation under the *Liverpool Local Environmental Plan 2008*. The area contains high quality existing native vegetation, provides an important area for passive recreation and is recognised as a place of Aboriginal significance. This area is owned and managed by Liverpool City Council. The objectives for the area are:

- *to enable land to be used for public open space or recreational purposes;*
- *to provide a range of recreational settings and activities and compatible land uses;*
- *to protect and enhance the natural environment for recreational purposes;*
- *to provide sufficient and equitable distribution of public open space to meet the needs of residents; and*
- *to ensure the suitable preservation and maintenance of environmentally significant or environmentally sensitive land.* (Liverpool LEP 2008)

The area is non-certified, therefore the NSW TSC Act continues to apply to the area and threatened species assessments are required to be undertaken where development is likely to have a significant effect on threatened species.

The long term conservation outcome for this area is expected to be strong. This is because:

- One of the key objectives is to preserve and maintain areas of environmentally significant or environmentally sensitive land; and
- The area will be managed under a plan of management under the *Local Government Act 1993*, which has clear requirements around the management of community land.

WESTLINK M7 OFFSETS

These lands have been acquired by the NSW Roads and Traffic Authority (RTA) to offset impacts related to the construction of the Westlink M7 Motorway (formerly known as the Western Sydney Orbital). There are three areas: one within the Public Recreation – Regional zone within the Area 20 Precinct, to the south of the Colebee Precinct and to the west of the Western Sydney Parklands within Kemps Creek Precinct (see Figure 4 and Figure 7). These lands will ultimately be transferred from the RTA to DECCW who will be responsible for the ongoing management of these lands under the NSW *National Parks and Wildlife Act 1974* (NP&W Act).

The NSW TSC Act continues to apply to these lands and threatened species assessments are required to be undertaken where development is likely to have a significant effect on threatened species. The long term conservation outcome for this area is expected to be strong. This is because:

- the land will be managed by the NSW Government for environmental conservation purposes;
- it is expected that the areas will be managed under Plans of Management under relevant legislation – e.g. under the NP&W Act which has clear requirements around the management of protected areas; and
- both the Growth Centres SEPP and the Relevant Biodiversity Measures provide strong protection for the vegetation within these areas. For example, under RBM 12, clearing is not permitted unless it is in accordance with a plan of management that is endorsed by DECCW.

Management of activities within the development areas

Appropriate mitigation and management measures within the development areas within the Growth Centres are also in place to avoid impacts on the protected areas. Again, these measures will further ensure that long term conservation outcomes are delivered successfully.

The Relevant Biodiversity Measures require a minimum of 2,000 ha of existing native vegetation to be retained and protected within the Growth Centres (RBM 6). As part of the precinct planning, consideration is given to the amount of existing native vegetation, as identified in the Conservation Plan, to be retained or otherwise offset consistent with the broader 2,000 ha requirement.

The Growth Centres SEPP and the Growth Centres Development Code include objectives and provisions that support the retention of native vegetation through incorporating existing vegetation into parks, centres, schools and other community facilities. Some existing areas may also be successfully incorporated into subdivision patterns and road design. These objectives will avoid widespread clearing prior to construction and enable the creation of attractive and liveable neighbourhoods.

The Development Code guides the preparation of Precinct Development Control Plans (DCPs), which establish the detailed development controls and standards for particular types of development. As each

of the precincts will vary in terms of the natural and built environment, the Development Code does not provide an exhaustive list of issues to be covered in a DCP, but rather the key issues that provide the starting point for the preparation of the DCP.

The management of development and activities within the development areas in the Growth Centres will be addressed in detailed controls in DCPs. It is considered that development in accordance with these provisions will avoid impacts on adjoining protected areas.

Precinct DCPs will establish environmental building and site controls including: privacy, energy conservation, waste management, salinity and soil management, cut and fill, contamination, bush fire, crime prevention, stormwater and biodiversity. Urban form controls relating to residential development, street networks, neighbourhood structure, density and centres are also addressed in DCPs.

In accordance with RBM 19 of the Biodiversity Certification, provisions must be included that require, where practicable, the appropriate use of native plants (including but not limited to seed collection) and the relocation of native animals from development sites prior to development commencing and the appropriate use of top soil from development sites that contain known or potential native seed bank. Appropriate uses may include, but are not limited to, revegetation or restoration works and landscaping in the Growth Centres.

Precinct planning addresses the following elements of sustainable greenfield land release planning, which will also minimise impacts on the protected areas. They include: open space planning – the location and design of parks to enable retention of existing vegetation to protect biodiversity; water sensitive urban design – integration of exhibition vegetation and natural drainage lines within the subdivision and road layouts and designs; and retention of existing vegetation in lower density areas and within recreation areas.

Many areas in the Growth Centres are currently degraded due to clearing and farming. To achieve leading practice urban outcomes, through detailed precinct planning additional areas will be zoned for open space, while land along riparian corridors is likely to be rehabilitated and revegetated as development occurs. This will further contribute to the amenity, sustainability and biodiversity value of the future towns and neighbourhoods of the Growth Centres. For example in Oran Park Precinct more than 148 hectares will be open space and in Riverstone West Precinct more than 70 hectares of land along the Eastern Creek corridor has been zoned for environmental conservation.

2.8 COMMITMENTS FOR MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

The Program includes a range of commitments for matters of national environmental significance protected under the EPBC Act. Section 5 of the Draft Program Report describes the commitments and the activities to achieve them for each of the key matters.

The commitments in the Draft Program Report are drawn from the analysis in Part B of this report and build upon the Relevant Biodiversity Measures for the Growth Centres Biodiversity Certification.

2.9 MONITORING AND REPORTING

Section 6 of the Program Report outlines the monitoring and reporting framework in relation to the Program. There are three main elements:

1. A public annual report highlighting the conservation outcomes achieved in the previous year.

2. A public report highlighting the consistency of each Precinct Plan with the requirements of the Program.
3. A review of the Program every four years to assess progress in achieving the objectives of the Program.

2.10 ANNUAL REPORT

An annual report highlighting the conservation outcomes achieved in the previous year will be published by the NSW Government and provided to DEWHA. This report will be completed within five months of the end of each financial year and will be made publicly available.

The report will address both NSW and Commonwealth requirements and address (among other things):

- the commitments for the relevant matters of national environmental significance (listed in Section 5 of the Program Report); and
- the funding provided and expended for offsets outside of the Growth Centres.

DoP and DECCW will be jointly responsible for the provision of information for the report. DECCW will be responsible for publication of the report.

2.11 PRECINCT PLAN CONSISTENCY REPORT

Each time a precinct within the Growth Centres is planned, DoP will report publicly on the consistency of the precinct with the requirements of the Relevant Biodiversity Measures and the EPBC Act. This report will form part of the package of information exhibited for comment during the public consultation phase of the precinct planning process, and be provided to DEWHA at the same time.

Given the current stage of the strategic assessment process, the final requirements of the EPBC Act are not yet resolved. The content of the consistency reports will be amended as appropriate pending these final requirements.

2.12 PROGRAM REVIEW

The final element in the evaluation framework for the Program will be a concurrent review of both the Relevant Biodiversity Measures and the Program every four years. The purpose of the review will be to assess progress in achieving the objectives of both NSW and the Commonwealth.

The review will be undertaken by DECCW and will include (among other things):

- progress in retaining and protecting the 2,000 ha of native vegetation within the Growth Centres;
- progress in achieving the required offset areas within the Growth Centres;
- progress in securing offsets outside of the Growth Centres; and
- a summary of the outcomes for matters of national environmental significance.