



Environment,
Climate Change
& Water



Planning

Sydney Growth Centres Strategic Assessment Draft Program Report

May 2010

FOR PUBLIC CONSULTATION

Contents

Contents	i
List of Tables	ii
List of Figures	iii
Abbreviations.....	iv
Executive Summary	v
1. Introduction	1
1.1 Rationale for the Program.....	3
1.2 Strategic Assessments under the EPBC Act.....	4
1.3 Purpose and structure of this document.....	5
2. Context for the Program	7
2.1 Government Directions and Policy Context.....	7
2.2 History of the Program.....	8
2.3 History and Current Condition of Native Vegetation.....	10
2.4 Conservation on the Regional Scale	11
2.5 Conservation rationale for offsetting both within and outside the Cumberland Plain.....	11
3. Program description	13
3.1 Definition of the Program	13
3.2 Program elements within the Growth Centres.....	13
3.2.1 The North West Growth Centre.....	14
3.2.2 The South West Growth Centre.....	22
3.3 Biodiversity offsets package	29
3.3.1 Conservation areas within the Growth Centres	29
3.3.2 Conservation areas outside of the Growth Centres.....	29
4. Program implementation	35
4.1 Legislative framework	35
4.2 Planning tools	36

4.3	Biodiversity Offset Program	50
4.4	Mitigation and management measures within the Growth Centres	59
5.	Commitments for matters of national environmental significance	66
5.1	Threatened ecological communities	67
5.2	Threatened flora.....	70
5.3	Threatened fauna.....	78
6.	Program evaluation, reporting and monitoring	84
6.1	Annual report	84
6.2	Precinct Plan consistency report	84
6.3	Program review.....	84
	References	86
	Appendix A: State Environmental Planning Policy (Sydney Region Growth Centres) 2006	87
	Appendix B: Growth Centres Biodiversity Certification Order - Relevant Biodiversity Measures.....	99

List of Tables

Table 1:	Sydney Growth Centres Strategic Assessment process.....	5
Table 2:	History of the Growth Centres Program	8
Table 3:	Land use outcomes for the North West Growth Centre	20
Table 4:	Transport infrastructure in the North West Growth Centre.....	21
Table 5:	Land use outcomes for the South West Growth Centre.....	27
Table 6:	Infrastructure in the South West Growth Centre	28
Table 7:	Other policies applying to the Growth Centres.....	47

List of Figures

Figure 1: Sydney Metropolitan Strategy Map.....	1
Figure 2: Location of the North West and South West Growth Centres	2
Figure 3: Boundaries of the North West Growth Centre	16
Figure 4: North West Structure Plan	17
Figure 5: Indicative layout of development and protected areas within the North West Growth Centre	19
Figure 6: Boundaries of the South West Growth Centre.....	23
Figure 7: South West Growth Centre Structure Plan	24
Figure 8: Indicative layout of development and protected areas within the South West Growth Centre	26
Figure 9: Schematic of the offset focus areas.....	31
Figure 10: Priority areas within the Cumberland Plain	32
Figure 11: Second preference offset areas.....	33
Figure 12: Grassy woodlands within and near to the Sydney Basin bioregion.....	34
Figure 13: Planning Framework for the Growth Centres	38
Figure 14: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18	41
Figure 15: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18	42
Figure 16: North Kellyville Indicative Layout Plan.....	45
Figure 17: Flow diagram of Precinct Planning	46
Figure 18: Administration of offset funds and program structure.....	51
Figure 19: St Mary’s Towers Location Map.....	57
Figure 20: Program commitments by location in the North West Growth Centre	82
Figure 21: Program commitments by location in the South West Growth Centre	83

Abbreviations

ABBREVIATION	DESCRIPTION
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
EPI	Environmental Planning Instrument
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 Conservation Act 1999</i>
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006</i>
ILP	Indicative Layout Plan
LEP	Local Environmental Plan
NPWS	National Parks and Wildlife Service
NP&W Act	NSW <i>National Parks & Wildlife Act 1974</i>
NSW	New South Wales
RBM	Relevant Biodiversity Measures
RTA	NSW Roads and Traffic Authority
SEPP	State Environmental Planning Policy
SIC	Special Infrastructure Contribution
SIMI	Statement of Interim Management Intent
The Certification	Growth Centres Biodiversity Certification
The Program	Sydney Growth Centres Program
TSC Act	NSW <i>Threatened Species Conservation Act 1995</i>

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 strategic assessment under the EPBC Act comprises two key documents:

- the Draft Program Report (this 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; and
- the Draft Strategic Assessment Report which provides a comprehensive assessment of the impact of the Program on matters of national environmental significance.

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 Federal 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 hectares 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 hectares 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 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.

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. Commitments are focused on those matters for which conservation activities are considered necessary and/or for which the Program will provide a benefit. These are:

- Threatened ecological communities: Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest, and Shale Sandstone Transition Forest.
- Threatened flora: 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*.
- Threatened fauna: Swift Parrot (*Lathamus discolor*), Green and Golden Bell Frog (*Litoria aurea*), Large-eared Pied bat (*Chalinolobus dwyeri*), and Grey-headed Flying Fox (*Pteropus poliocephalus*).

The commitments provided in the Draft Program Report are drawn from the analysis in the Draft Strategic Assessment Report and build upon the Relevant Biodiversity Measures for the Growth Centres Biodiversity Certification. For the detail about each matter, please refer to the Draft Strategic Assessment Report.

PROGRAM EVALUATION, REPORTING AND MONITORING

The NSW Government has an established framework for reporting against the requirements of the Relevant Biodiversity Measures. This framework will be adapted to include the EPBC Act reporting and evaluation requirements for the Program.

There are three main elements to the reporting framework:

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.

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.

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 and Figure 2). It also aims to secure a range of other conservation areas throughout Western Sydney and the broader Sydney region.

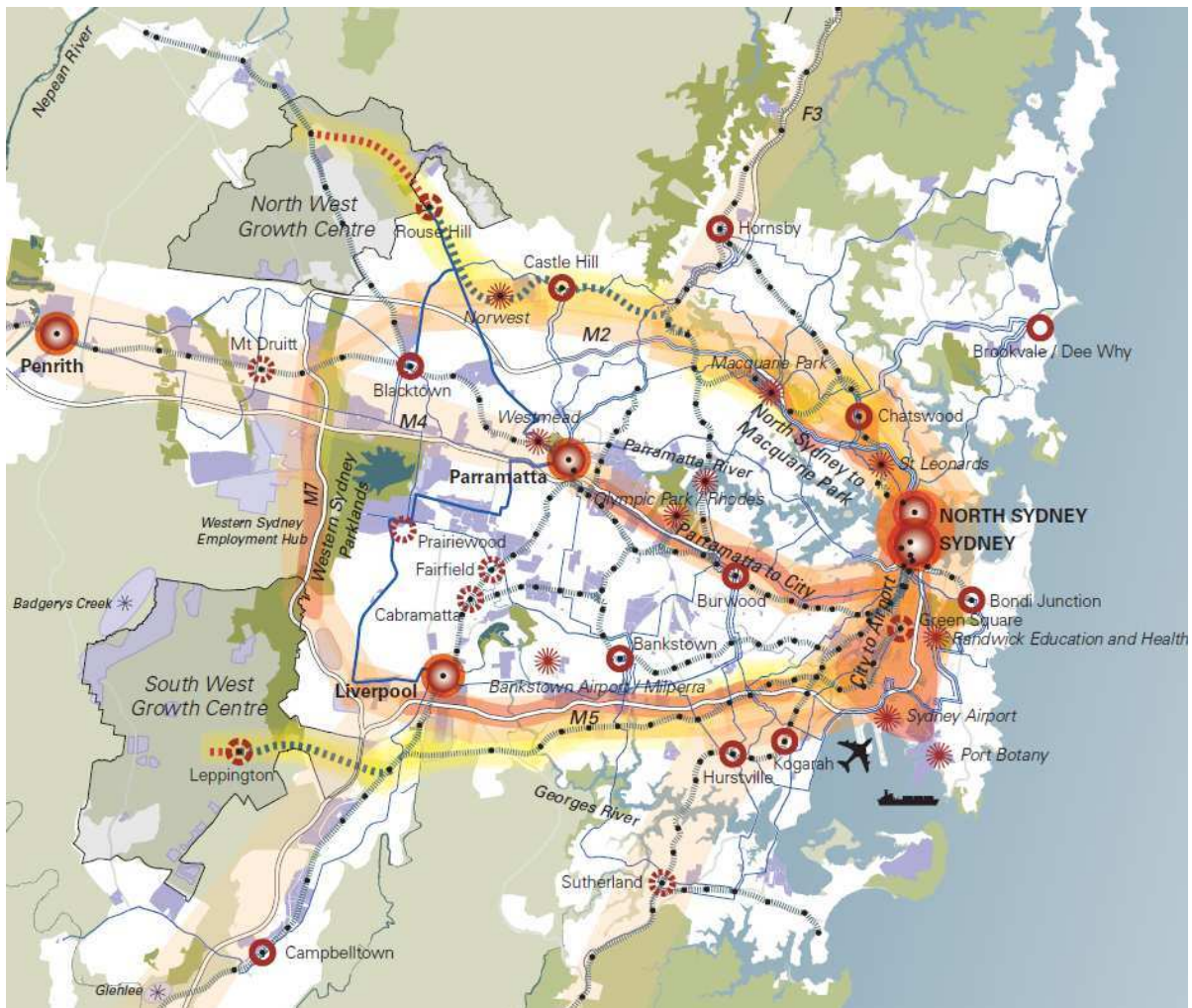


Figure 1: Sydney Metropolitan Strategy Map



Figure 2: Location of the North West and South West Growth Centres

The key benefits of the strategic assessment approach are twofold: superior conservation outcomes and significantly improved certainty for development outcomes compared with site-by-site development assessment. Identifying conservation outcomes for large areas such as the Growth Centres enables a well designed network of land managed for conservation to be identified and secured. The ad hoc site by site approach where small scale impacts are assessed and small scale, on-site offsets secured are unable to deliver such comprehensive outcomes.

The strategic assessment means early consideration of matters of national environmental significance in the planning process and the identification and delivery of significant and real conservation outcomes. Cumulative impacts are considered and addressed and environmental, social and economic issues are balanced at the strategic level. The strategic assessment builds upon the Growth Centres Biodiversity Certification, and if approved will further streamline the development assessment process and reduce costs associated with land and housing supply, by providing greater certainty to communities and developers by removing the need for site based assessment of matters of national environmental significance.

This strategic assessment under the EPBC Act comprises two key documents: the draft Program Report (this 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; and the draft Strategic Assessment Report which provides a comprehensive assessment of the impact of the Program on matters of national environmental significance.

1.1 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 making co-operation among landowners difficult. 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.

1.2 STRATEGIC ASSESSMENTS UNDER THE EPBC ACT

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 and draft program report prepared.	COMPLETED
4. The draft strategic assessment report and draft program report exhibited for public comment for at least 28 days.	CURRENT
5. Following public comment the strategic assessment report and program report are 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.

1.3 PURPOSE AND STRUCTURE OF THIS DOCUMENT

The NSW Government aims to provide certainty to the Commonwealth Government that the likely impacts of implementing the Program on matters of national environmental significance will be managed through the process of urban and infrastructure development and proposed mitigation measures.

Noting that the Program will be in place for 30+ years, references to legislation in this document are provided generally for background information and contextual purposes. Amendments to this legislation over time will not interfere with the applicability or requirements of the Program where those amendments do not affect the conservation activities and outcomes outlined in this document.

Similarly, references to the names of Commonwealth and NSW Government Departments and portfolio agencies are correct as at the time of publication. Any change in the names of these entities will not, of itself, interfere with the applicability or requirements of the Program.

The Program Report is structured as follows:

- 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.

2. Context for the Program

2.1 GOVERNMENT DIRECTIONS AND POLICY CONTEXT

Based on the NSW Government projections, the population of Sydney is projected to grow by 1.7 million people to nearly 6 million by 2036, presenting significant challenges to governments to provide appropriate and affordable housing, infrastructure and services. Both the NSW and Commonwealth Governments have made public commitments supporting the streamlining of development processes in order to improve land and housing supply and affordability, while ensuring environmental outcomes.

In a move away from an ad hoc approach to greenfield housing development in Western Sydney, in June 2005 the NSW Government exhibited draft plans for *Managing Sydney's Growth Centres*. This exhibition included planning and infrastructure reports outlining the NSW Government's commitment to adopting a new approach to land release by identifying the North West and South West Growth Centres in Western Sydney, 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.

In December 2005, the *Metropolitan Strategy: City of Cities* was released. The Metropolitan Strategy includes a range of actions and objectives supporting delivery of urban development within the Growth Centres. In particular, the Metropolitan Strategy identifies the importance of focusing greenfield development in the Growth Centres in order to protect other land of resource/agricultural and environmental significance and to provide for the efficient use of infrastructure including the North West and South West Rail Link, water, wastewater, road, education and health infrastructure. The Metropolitan Strategy aims to address Sydney's growing population by encouraging infill development (to meet 60-70% of the population growth needs) and well-planned greenfields development for the remainder.

Since then the NSW Government has commenced coordinated planning and infrastructure delivery in the Growth Centres, to facilitate the supply of new land to the market as quickly and efficiently as possible with the best use of Government resources. The Growth Centres will provide for 181,000 dwellings, at least 2,500 ha of land for employment and \$7.5 billion in regional infrastructure to support up to half a million additional residents over 30+ years.

The coordination of conservation outcomes at the landscape scale under the NSW *Threatened Species Act 1995* (TSC Act) through the Growth Centres Biodiversity Certification has been secured and is currently being implemented by the NSW Government. Already, significant conservation outcomes have resulted, including the purchase of the 181-hectare Cranebrook site, which protects Commonwealth listed plant species, and the establishment of a biobanking agreement over 80 hectares at St Mary's Towers, which will ensure best-practice management of two Commonwealth listed threatened ecological communities.

After several years of environmental studies and planning, public exhibition and the securing of a conservation fund, Biodiversity Certification has been granted over the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP), allowing development in the Growth Centres to proceed without further NSW threatened species assessment on certified areas on the basis that agreed conservation outcomes are delivered. Through levies on development in the Growth Centres, \$530 million (in 2005/06 dollars) will be provided to purchase land for conservation within the Growth Centres and to secure offsets outside the Growth Centres. The conservation levy

applies to all developable land within the Growth Centres (excluding public services and utilities etc) resulting in the costs of conservation outcomes being equitably shared across the Growth Centres.

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 HISTORY AND CURRENT CONDITION OF NATIVE VEGETATION

The environmental history of Western Sydney stems in part from its geography, low lying plains and low hills with generally clay soils. These soils have formed over eons from the underlying shale, and in places are mixed with sandstone and gravel. These soils, natural patterns of fire and relatively low rainfall, gave rise to a mosaic of grassy woodlands, forests and swamps used by a wide range of animals. Over many years some unique plant species have evolved.

Aboriginal people have inhabited the area continuously for thousands of years. Early European settlement of the Sydney region was challenged by the lack of fertile soils near the coast. The realisation that more fertile soils lie to the west led to rapid settlement. Drainage of swamps and clearing of vegetation was encouraged to enable cropping and grazing, so that by the middle of the 19th century much of the native vegetation had been significantly altered. In the 20th century, clearing for agriculture was also exacerbated by clearing for residential, commercial and industrial development (DECCW 2009).

Today, the natural environment in Western Sydney is permanently altered. Western Sydney is a mixture of land uses and tenures. Most land is freehold, with urban areas often bordering on semi-rural lands or 2 hectare rural residential lots. Within the Growth Centres there are more than 20,000 existing lots. Some agricultural uses persist, including market gardens. Waterways are generally in poor condition. Major infrastructure, including freeways, power lines and water and waste water, criss-cross the area. No known old-growth forests remain.

Where regrowth vegetation occurs, it is generally either along waterways or in small, isolated and irregularly shaped patches. Of around 2,400 patches of remnant vegetation across the entire Cumberland Plain, 1,500 are less than 4 ha. In part, because of their small size, these habitats are often weed infested and generally no longer support the full range of native animals which once occurred there. The introduced weed African Olive is rampant in the southern part of the area, where researchers at the Mount Annan Botanic Gardens have found that it will overwhelm native vegetation within fifteen years. Even if large areas of cleared land could be affordably obtained, restoration research has demonstrated that attempts to recreate Cumberland Plain Woodlands have been unsuccessful to date.

Despite these challenges, significant conservation outcomes have been achieved in some areas. Larger areas have been targeted for reservation, such as Scheyville National Park (gazetted 1996), so that 7% of the Cumberland Plain vegetation is protected within formal reserves (DECCW 2009). Areas with high management viability should be actively retained and managed, because they are in good condition, relatively large, and have a good landscape context supporting ongoing ecological functioning. In 2008/09, the Cranebrook site was purchased using funding from both the Commonwealth Government and the Growth Centres Conservation Fund, ensuring the protection of several threatened plant populations as well as threatened ecological communities (refer to section 4.3). Active negotiation is underway between NSW and major Commonwealth land owners aimed at securing additional conservation lands, including land at Edmondson Park and Shanes Park. Major infrastructure and development projects, including the Westlink M7 Motorway and Harrington Park, have been required to offset impacts through acquiring and protecting additional lands for conservation.

In addition to protected and reserved areas, a concerted effort is being made to ensure that vegetation is retained in open space lands, including flood prone and major creeks land and the Western Sydney Parklands, one of the largest urban parklands in the world. Vegetation will also be retained within future residential communities to enhance amenity and contribute to broader conservation outcomes, while riparian corridors will also be identified and protected to conserve their hydrological and habitat functions.

The NSW Government employs the full range of tools to support conservation in Western Sydney, ranging from regulation to education and community involvement. Threatened ecological communities and threatened species habitat is regulated in Western Sydney as elsewhere in the state. Development assessment processes under NSW planning and threatened species legislation are in force. At the other end of the spectrum, Landcare and other community groups are active throughout the region, conducting weed control and bush regeneration of local bushlands, often with funding support for particular projects through the NSW Environmental Trust grants program and various Commonwealth programs.

2.4 CONSERVATION ON THE REGIONAL SCALE

It is clear that, looking to the future, planning for the conservation of biodiversity in Western Sydney must be linked to planning for future population growth. This linkage is already well established through the Growth Centres Biodiversity Certification, which ensures that a levy on development contributes to a fund for conservation offsets (the Growth Centres Conservation Fund).

The Fund includes \$132.5 million (in 2005/06 dollars) for the purchase or transfer of high management viability vegetation within the Growth Centres (including Shanes Park east, Rouse Hill, Kemps Creek east, Kemps Creek west, and Rileys Creek). Areas in Riverstone and Marsden Park in the North West Growth Centre are also being acquired by the NSW Government and the relevant local Council separately to the fund.

\$397.5 million (in 2005/06 dollars) will be used to secure nearby land with similar ecological values. Contributions to the Fund are linked to the rate of development so that offsets will be secured in step with the clearing of vegetation.

In the absence of such a planned approach in the Growth Centres, incremental planning decisions and individual actions would result in inferior conservation outcomes. Past experience suggests that site-by-site decision making results in “paper offsets” – such as protection and management of very small areas which have little ecological function. Such small remnants of native vegetation are susceptible to weed infestations, and vandalism. Site-by-site processes offer no prospect of big picture offset thinking, are costly to both the private sector and Government and allow development to erode areas which are of greatest ecological value regionally, such as the high management viability areas to be retained in the Growth Centres. Court processes and consultants’ reports squander resources which might otherwise have been directed toward outcomes. In addition, uncoordinated and ad hoc land release does not provide the opportunity for strategic landscape scale conservation outcomes, such as the purchase of large areas of remnant vegetation for reservation.

2.5 CONSERVATION RATIONALE FOR OFFSETTING BOTH WITHIN AND OUTSIDE THE CUMBERLAND PLAIN

The Growth Centres Conservation Fund is focused on securing cost-effective offsets inside and outside of the Growth Centres that provide large remnants of intact native vegetation with the greatest potential for retaining biodiversity values over time.

While there has been an emphasis in the past on only obtaining offsets near to where impacts occur in the same habitats (“like-for-like”), generally driven by local interest, this approach would severely limit the potential for the Fund to secure large tracts of vegetation for the future. The Fund is therefore structured to provide a balanced approach to securing offsets both within and outside of the Cumberland Plain to provide the maximum biodiversity benefit.

The priorities of the Fund are twofold. Inside the Growth Centres it is to progressively acquire and manage land for offsets. This land has been zoned under the Growth Centres SEPP for environmental conservation. The first priority for the Fund for offsets outside the Growth Centres is to find and secure offset areas within the priority conservation lands on the Cumberland Plain (discussed in Section 4.3). This approach provides the opportunity to secure the best remaining vegetation (of a similar type to the Growth Centres) within a fragmented and degraded landscape.

As a second preference, the Fund then focuses more broadly to allow for the protection of larger, more cost-effective offset areas within the wider Sydney Basin Bioregion and the Hawkesbury-Nepean Catchment. There is a strong rationale for this approach based on trends in climate change adaptation, conservation theory, and cost effectiveness.

Over time, climate change is likely to result in changes in areas where plants and animals occur. Securing real corridors known to be used by animals within the wider Sydney Basin Bioregion and the Hawkesbury-Nepean Catchment would support the ecological functioning of some of the priority conservation lands within the Cumberland Plain.

Ecological communities are generally described as lists of plant species. This is the standard practice for both the NSW and Commonwealth Governments. The Commonwealth ecological community of *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest* (CPW) listed under the EPBC Act is the most prevalent Commonwealth ecological community in the Growth Centres. By comparing the typical composition of CPW with the composition of grassy woodlands elsewhere in the Sydney Basin Bioregion and Hawkesbury Nepean Catchments, it is possible to identify vegetation assemblages which have a similar composition to CPW. Unlike species descriptions, the taxonomy of vegetation communities is an inexact science. This is a result of the fact that vegetation “communities” are assemblages of co-occurring species whose habitat requirements and ranges overlap.

A further argument in favour of allowing offsets for CPW to occur outside the Cumberland Plain relates to the function of vegetation as a surrogate for animal habitat. Species-specific habitat relationships between birds, reptiles or mammals and plants are rare in Australian systems; the physical structure of vegetation communities is the primary driver for what species occur there. In general, grassy woodlands in Sydney Basin Bioregion and Hawkesbury Nepean Catchments provide habitat for woodland birds and other native animals, many of which are already extinct or rare on the Cumberland Plain.

While it is crucial to continue to identify the best remaining opportunities for conservation within the Cumberland Plain, the securing of offset lands in the broader area provides the opportunity to protect much larger areas of remnant native vegetation. For example, the cost of Cranebrook was more than \$96,000 per hectare, compared to approximately \$1,500 per hectare for a proposed new reserve in the Capertee Valley, which is a ratio of 64 to 1. Of course, this simple comparison does not take into account the unique biodiversity of each property but it provides an indication of the high cost of Western Sydney land. The approach proposed in this Program Report will ensure that, over the more than 30+ year life of the Program, the best opportunities for conservation in the Cumberland Plain are taken, while significant areas of other EPBC-listed grassy woodlands are also conserved.

3. Program description

This section describes broadly the Program, which was originally designed to address NSW planning and environmental requirements, that is now the subject of the strategic assessment under the Commonwealth EPBC Act. Further detail on how the Program is being implemented is provided in Section 4.

3.1 DEFINITION OF THE PROGRAM

The Sydney Growth Centres Program will provide for urban development and conservation including:

- residential, employment, open space, conservation and protected areas and related infrastructure within the North West and South West Growth Centres (illustrated in Figure 3 and Figure 6 respectively) over 30+ years; and
- a \$530 million (2005/06 dollars) biodiversity offsets package to protect high conservation value areas both *within and outside* the Growth Centres.

A description of the various elements of the Program is provided in this section. Detail of the legislative framework, planning tools and funding processes that will be used to implement the Program are described in Section 4.

3.2 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 (described in detail in Section 4) to be acquired by the NSW Government.

Section 4 describes the various levels of protection for these areas, and Section 5 outlines the specific outcomes these areas will provide for the protection of matters of national environmental significance.

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.

3.2.1 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 3.

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

The development of these precincts will be generally in accordance with the North West Structure Plan (see Figure 4) which guides the location of town centres, neighbourhood centres, industrial and conservation lands.

The land identified as being capable of urban development excludes those areas identified as having high biodiversity significance or offering an opportunity to protect and maintain existing vegetation. These areas and significant riparian corridors such as South Creek, Eastern Creek and Cattai Creek have been protected through the vegetation clearing development controls under the Growth Centres SEPP.

There will be a string of transit-oriented towns located on either side of the existing Richmond rail line, and Rouse Hill Major centre will provide regional and higher order services for the North West Growth Centre.

The eastern part of the North West Growth Centre includes North Kellyville and Box Hill. The North West Transitway along Windsor Rd will provide the key public transport service connecting the Growth Centre with Parramatta and Blacktown. The construction of the North West Rail Link will commence in 2017 and connect Rouse Hill to Epping and then onto the Sydney CBD. Planning and land acquisition for this rail link is well advanced. Although the North West Rail Link will serve the future development within the North West Growth Centre it is located outside the Growth Centre.

The central part of the Growth Centre is focused on the Richmond rail line. Opportunities for new development have been identified in Vineyard, Riverstone, and Schofields to the south. These centres and urban areas will take advantage of the existing transport links and its central location in the Growth Centre.

The western part of Marsden Park provides for a town centre near Richmond Road and an employment and industrial area.

The Growth Centre has been divided into local areas which are large enough to accommodate a critical mass of population and development, and which will facilitate the provision of public transport.

A town centre providing a mix of services and facilities is identified for each of the local areas. The size of each centre will depend on the size of its local area, being its primary retail catchment.

There are also several areas of employment-related or industrial land identified for larger-scale enterprises. These areas are distributed to ensure that each part of the Growth Centre has a local service industry area. They also have good access to major roads, and are generally able to be separated from other activities. This is essential to ensure a range of employment opportunities are provided for the future population.

The North West Growth Centre adjoins the existing urban areas to the south and east, and is linked via a number of existing routes that will be upgraded. These will provide public and private transport links with the existing North West subregion and the broader Sydney metropolitan area.

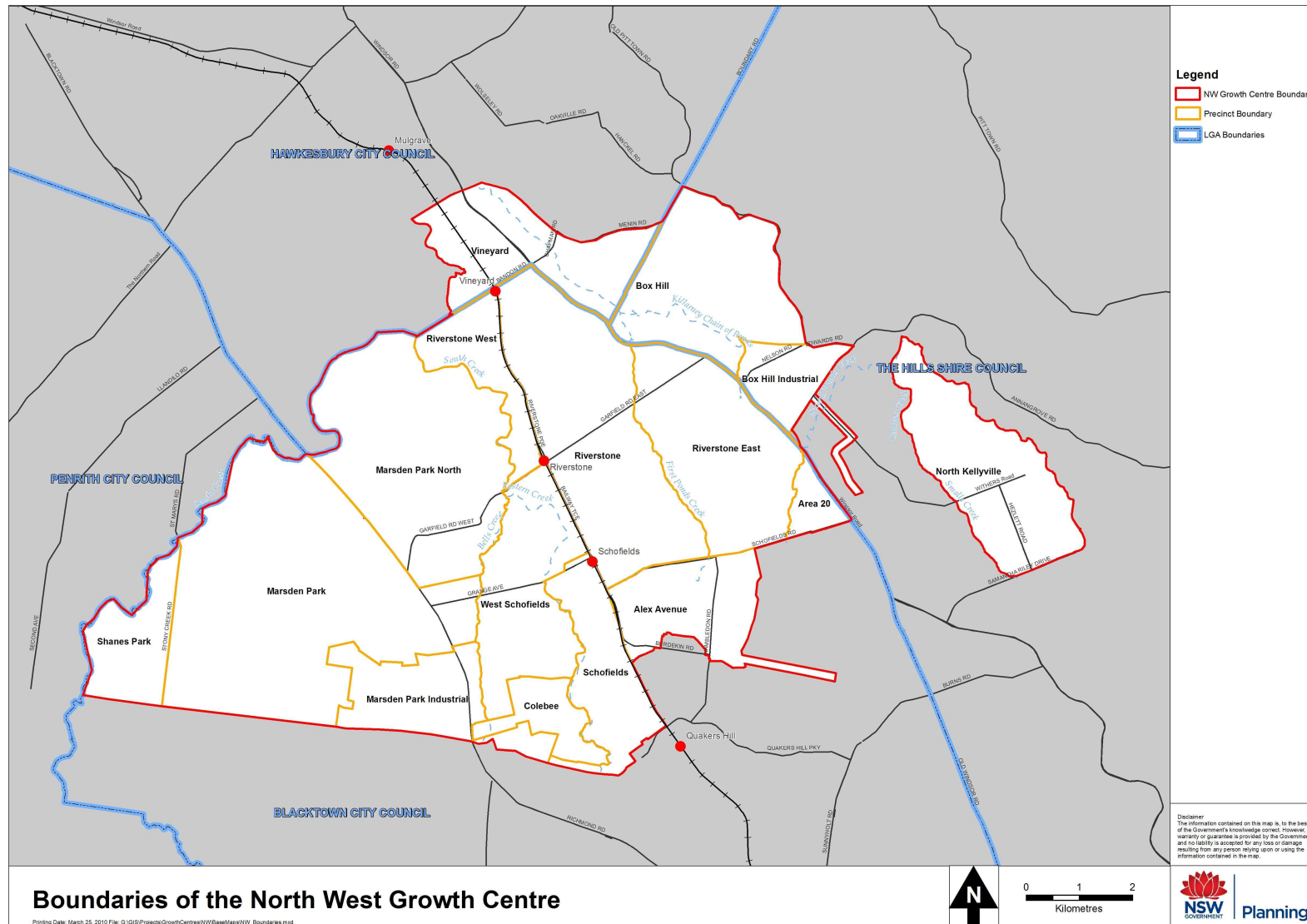


Figure 3: Boundaries of the North West Growth Centre

NORTH WEST GROWTH CENTRE STRUCTURE PLAN (EDITION 3)

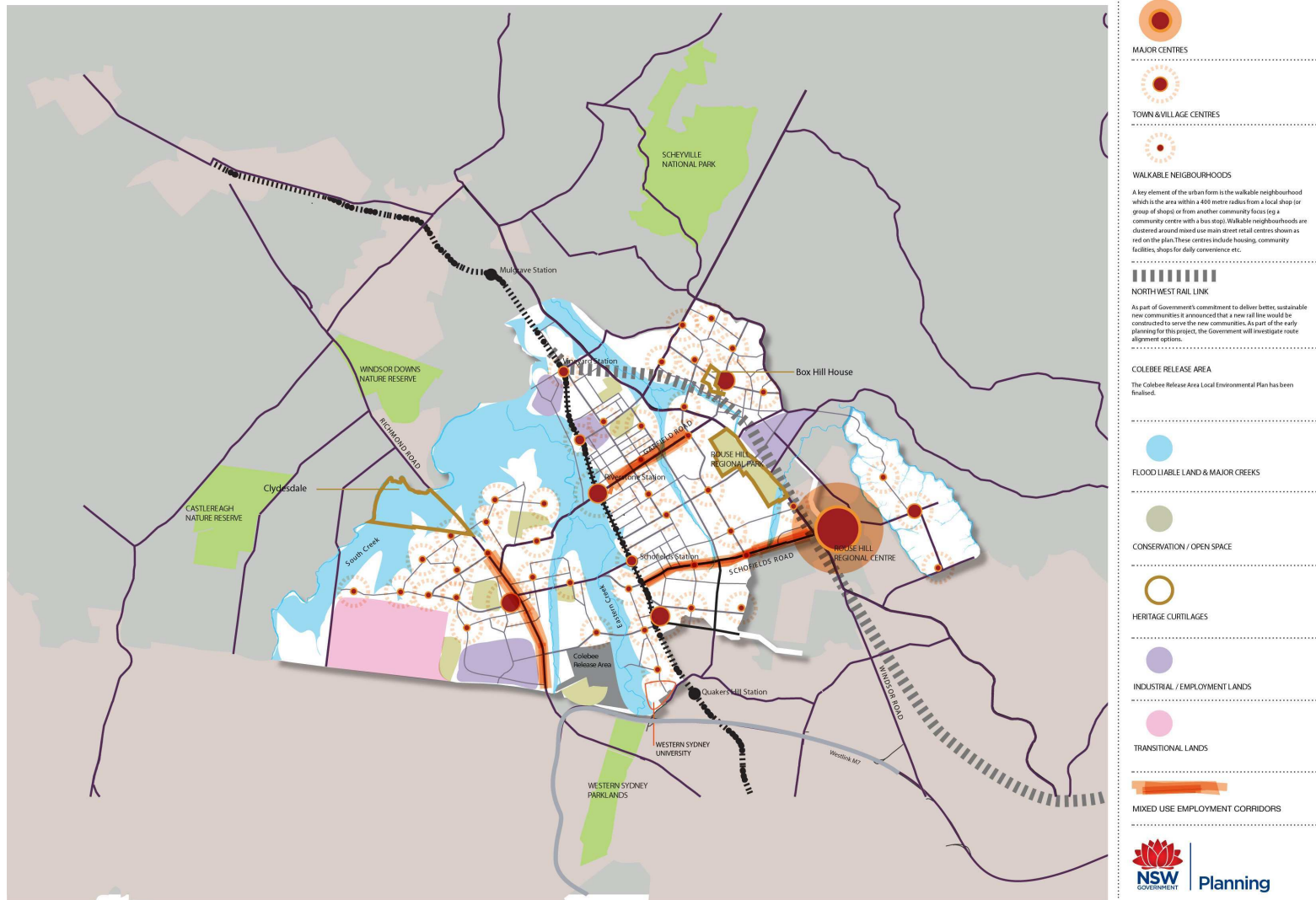


Figure 4: North West Structure Plan

Urban development and protected areas

The indicative layout for the North West Growth Centre showing development and protected lands is shown in Figure 5. Details of each of these protected areas are included in section 4. These boundaries are indicative as boundary changes may occur during the more detailed planning processes (see Section 4). This has already occurred as part of the detailed planning for the Colebee, North Kellyville, and Riverstone West Precincts.

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:
 - Environmental conservation areas which have the main objective of protecting and restoring areas with ecological, scientific or aesthetic value.
 - 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.
 - 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 5.

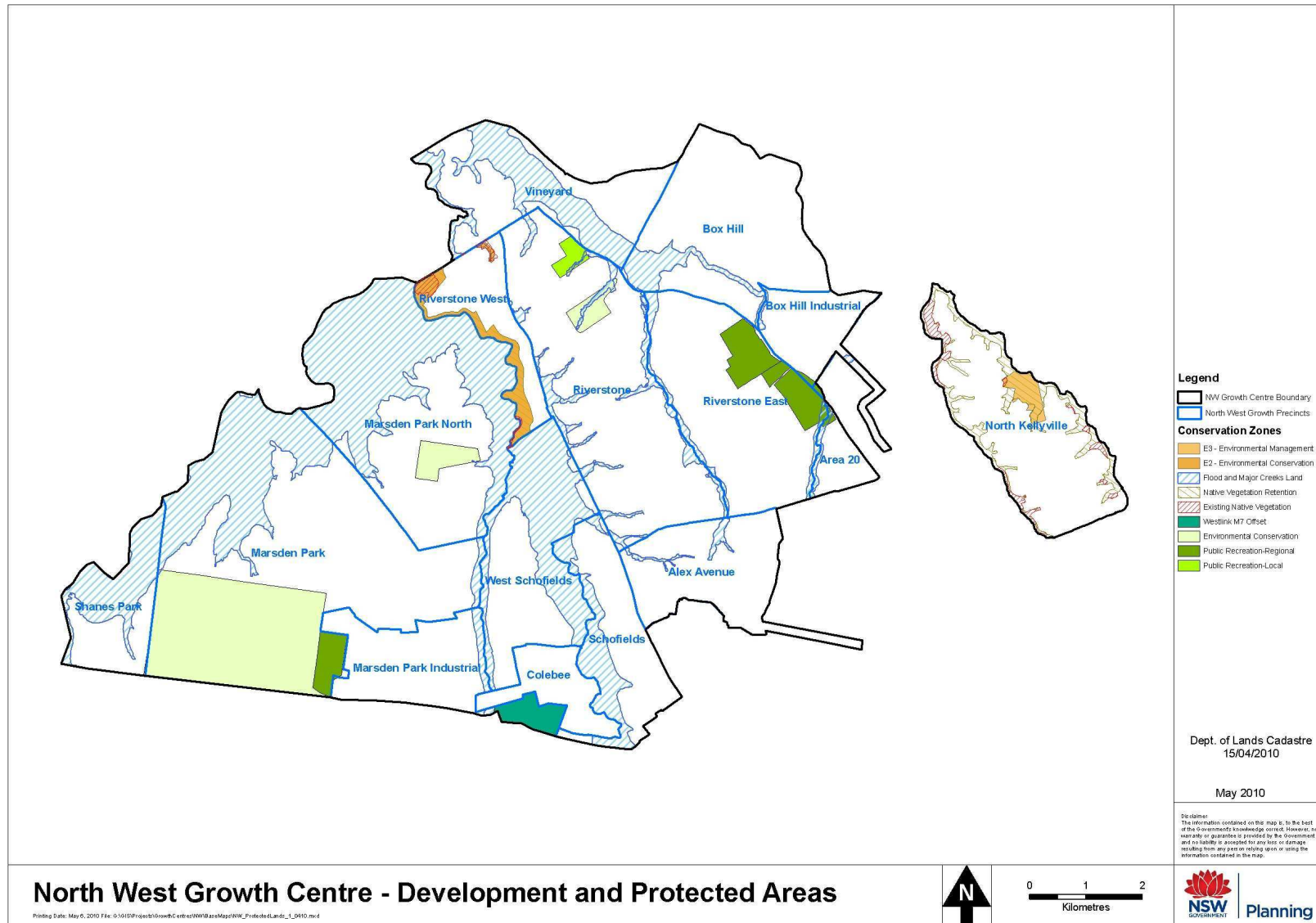


Figure 5: Indicative layout of development and protected areas within the North West Growth Centre

An overview of the indicative land use outcomes for each precinct is provided in Table 3. It should be noted that these outcomes are indicative and may vary according to the more detailed planning processes that are carried out for each precinct (described in Section 4). This has already occurred as part of the detailed planning for the Colebee, North Kellyville, and Riverstone West Precincts which have been rezoned.

Table 3: Land use outcomes for the North West Growth Centre

Precinct	Dwelling Target	Estimated Population	Centres and Employment	Lands zoned and to be acquired for environmental conservation
REZONED PRECINCTS – Precinct Planning completed				
Colebee	1,000	2,800	-	
North Kellyville	4,500	12,600	Local Centre	
			Neighbourhood Centres	
Riverstone West	Employment Lands		16 ha Business Park	
			72 ha Industrial	
			16 ha Light Industrial	
			Neighbourhood Centres	
RELEASED PRECINCTS – Precinct Planning underway				
Alex Avenue	6,300	18,000	Town Centre	
Area 20	2,500	7,000	Neighbourhood Centre	Public Recreation (partly within Riverstone East Precinct)
Box Hill	10,000	28,000	Town Centre	
			Neighbourhood Centres	
Box Hill Industrial	Employment Lands		Industrial/Employment Lands	
Marsden Park Industrial			67 ha Business Park	
			36 ha Bulky Goods Retailing	
			205 ha Light Industrial	
Riverstone	9,000	27,000	Major Town Centre	Environmental Conservation
			14 ha Industrial	Public Recreation
			Neighbourhood Centres	
Schofields	5,000	14,000	Town Centre	
			Neighbourhood Centres	
PRECINCTS YET TO BE RELEASED – Precinct Planning not yet commenced				
Marsden Park	11,000	30,800	Town Centre	Environmental Conservation
			Neighbourhood Centres	Public Recreation
Marsden Park North	4,000	11,200	Neighbourhood Centres	Environmental Conservation
Riverstone East	6,000	16,800	Neighbourhood Centres	
Shanes Park	500	1,400	-	
Vineyard	2,500	7,000	Neighbourhood Centres	
West Schofields	2,000	5,600	Neighbourhood Centres	

Transport infrastructure

Table 4 identifies new and upgraded transport infrastructure for the North West Growth Centre.

Table 4: Transport infrastructure in the North West Growth Centre

	Upgrade	New
Road	<ul style="list-style-type: none"> • Withers Road • The Water Lane • Annangrove Road • Nelson Road • Hambledon Road • Stanhope Parkway/Burdekin Road/Townson Road corridor • Schofields Road/South Street corridor • Garfield Road corridor • Terry Road • Quakers Hill Parkway corridor • Richmond Road • Railway Terrace • Bandon Road 	Local roads within precincts
Rail	Duplication of the Richmond rail line between Quakers Hill and Schofields is soon to be completed.	<p>The North West Rail Link will connect Rouse Hill and Norwest Business Park to the Cityrail network at Epping.</p> <p>Construction of the North West Rail Link will commence in 2017. On completion of the 23 kilometre rail line in 2024, there will be six new underground stations including stations at Cherrybrook, Castle Hill, Norwest Business Park and Rouse Hill.</p>
Bus	1000 new buses will be added to Sydney's bus network, increasing the size of the existing fleet by around 25% and delivering faster and more reliable services. This will include bus services for the North West Growth Centre.	<p>A bus transitway connecting Parramatta with Rouse Hill has been constructed.</p> <p>Further strategic bus corridors have been planned within the North West Growth Centre and will be implemented by 2014.</p>

3.2.2 The 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 6.

The South West Growth Centre 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 7) which guides the location of town centres, neighbourhood centres, industrial and conservation lands.

The land identified as being capable of urban development excludes those areas identified as having high biodiversity significance or offering an opportunity to strengthen existing vegetation. These areas and significant riparian corridors such as South Creek and Kemps Creek have been protected through the vegetation clearing development controls under the Growth Centres SEPP.

The proposed major centre of Leppington will be located within the Leppington North Precinct and will be serviced by the South West Rail Link with a new railway stations to be constructed at Leppington and Edmondson Park. Planning and land acquisition for this rail link is well advanced, with stage 1 under construction. Ultimately, Leppington will provide for around 8,000 new jobs and land for higher order retail, civic and commercial uses which will support the population of the South West Growth Centre.

The Growth Centre has been divided into local areas which are large enough to accommodate a critical mass of population and development, and which will be structured to facilitate the provision of public transport.

A town centre providing a mix of services and facilities is identified for each of the local areas. The size of each centre will depend on the size of its local area, which is its primary retail catchment.

There are also several areas of employment and industrial land identified for larger-scale enterprises and those with heavy truck use. These areas are distributed to ensure that each part of the Growth Centre has a local service industry area. They also have good access to major roads, and are generally able to be separated from other activities.

The South West Growth Centre is linked to the existing urban areas to the east via a number of existing routes that will be upgraded and new east-west links. These will provide public and private transport links with the existing South West Sydney subregion and the broader Sydney metropolitan area.

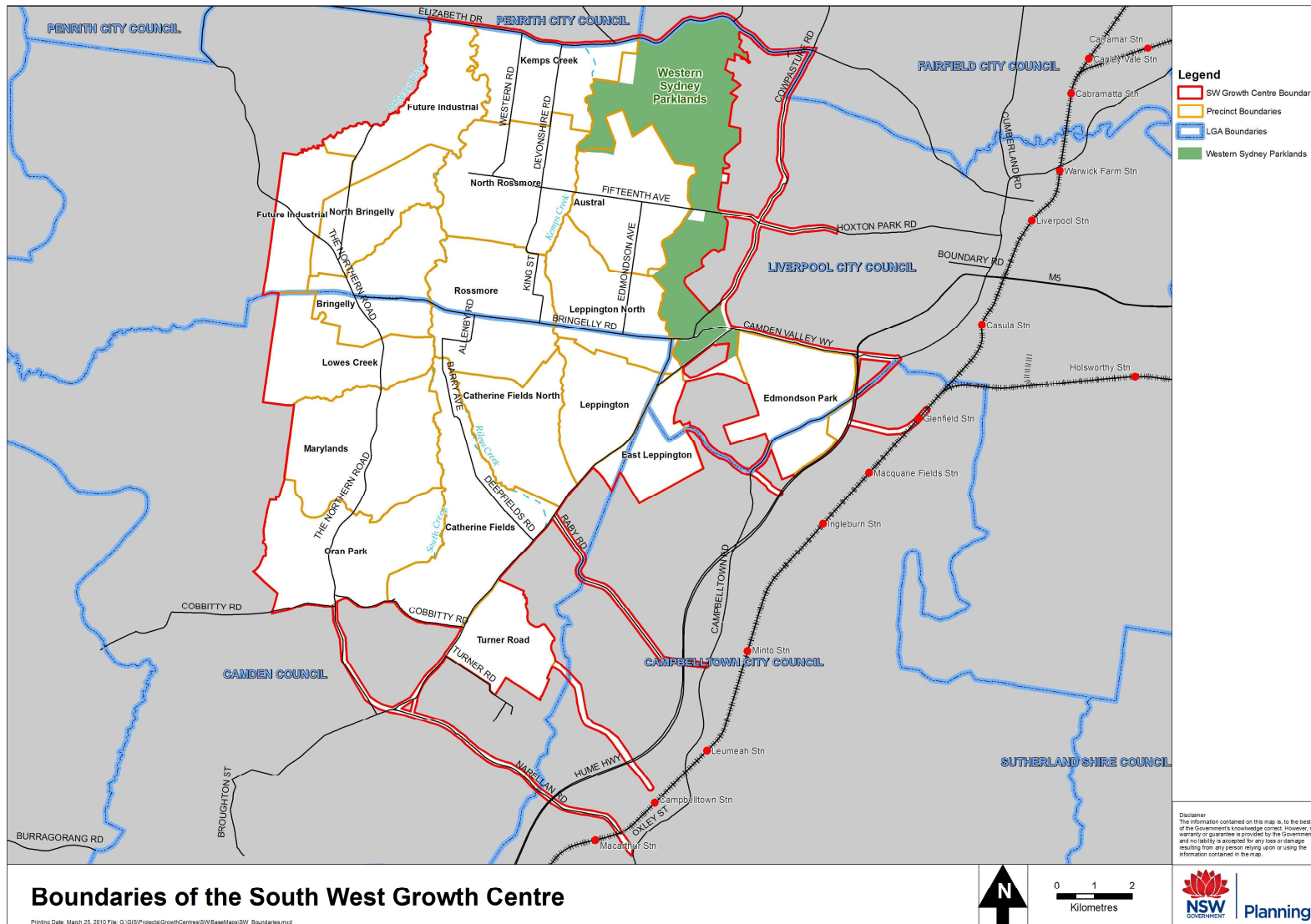


Figure 6: Boundaries of the South West Growth Centre

SOUTH WEST GROWTH CENTRE STRUCTURE PLAN (EDITION 3)

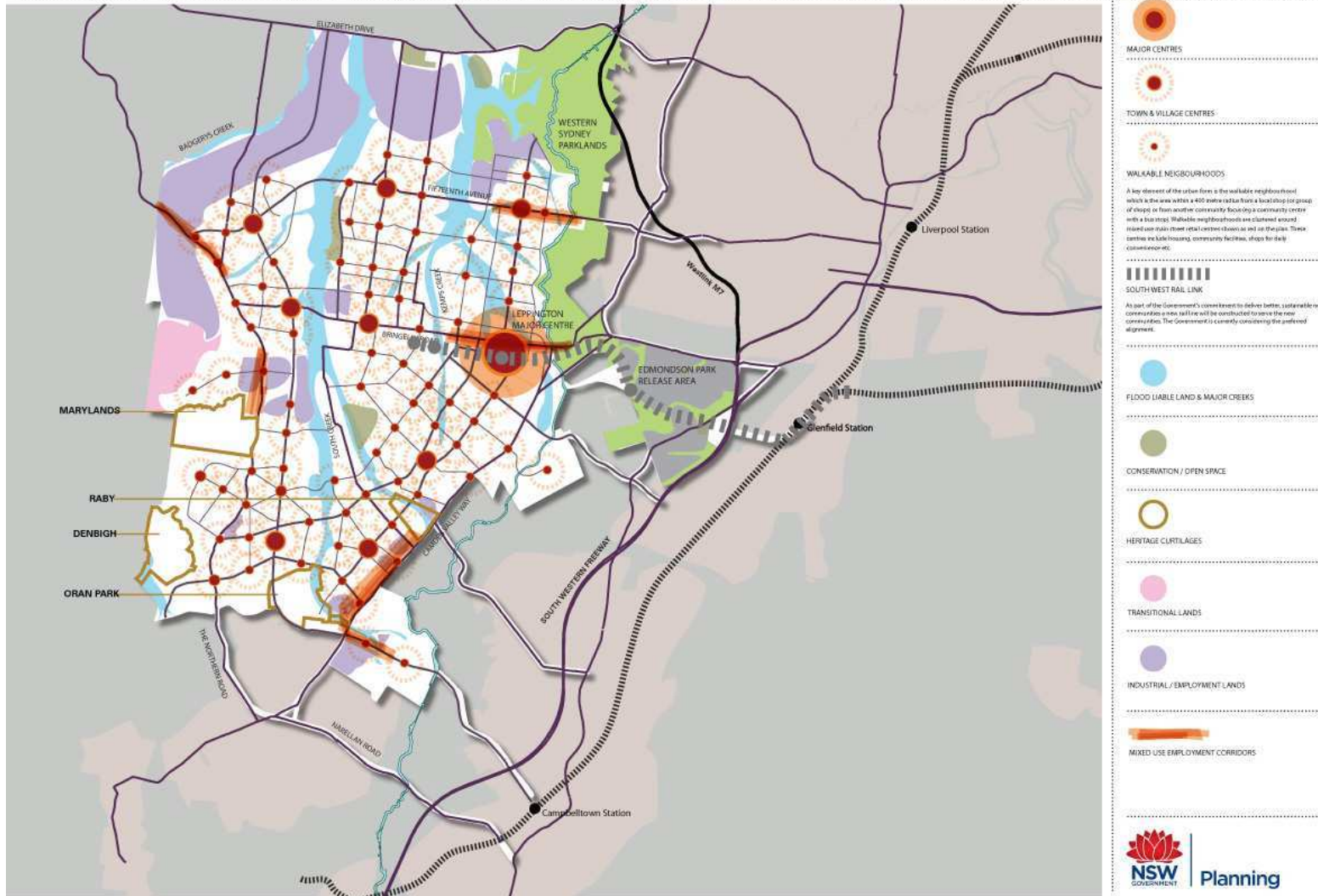


Figure 7: South West Growth Centre Structure Plan

Urban development and protected areas

The indicative layout for the South West Growth Centre showing development and protected lands is shown in Figure 8. Details of each of these protected areas are included in section 4. These boundaries are indicative as boundary changes may occur following detailed planning processes (see Section 4). This has already occurred as part of the detailed planning for the Edmondson Park, Oran Park and Turner Road Precincts.

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 8.

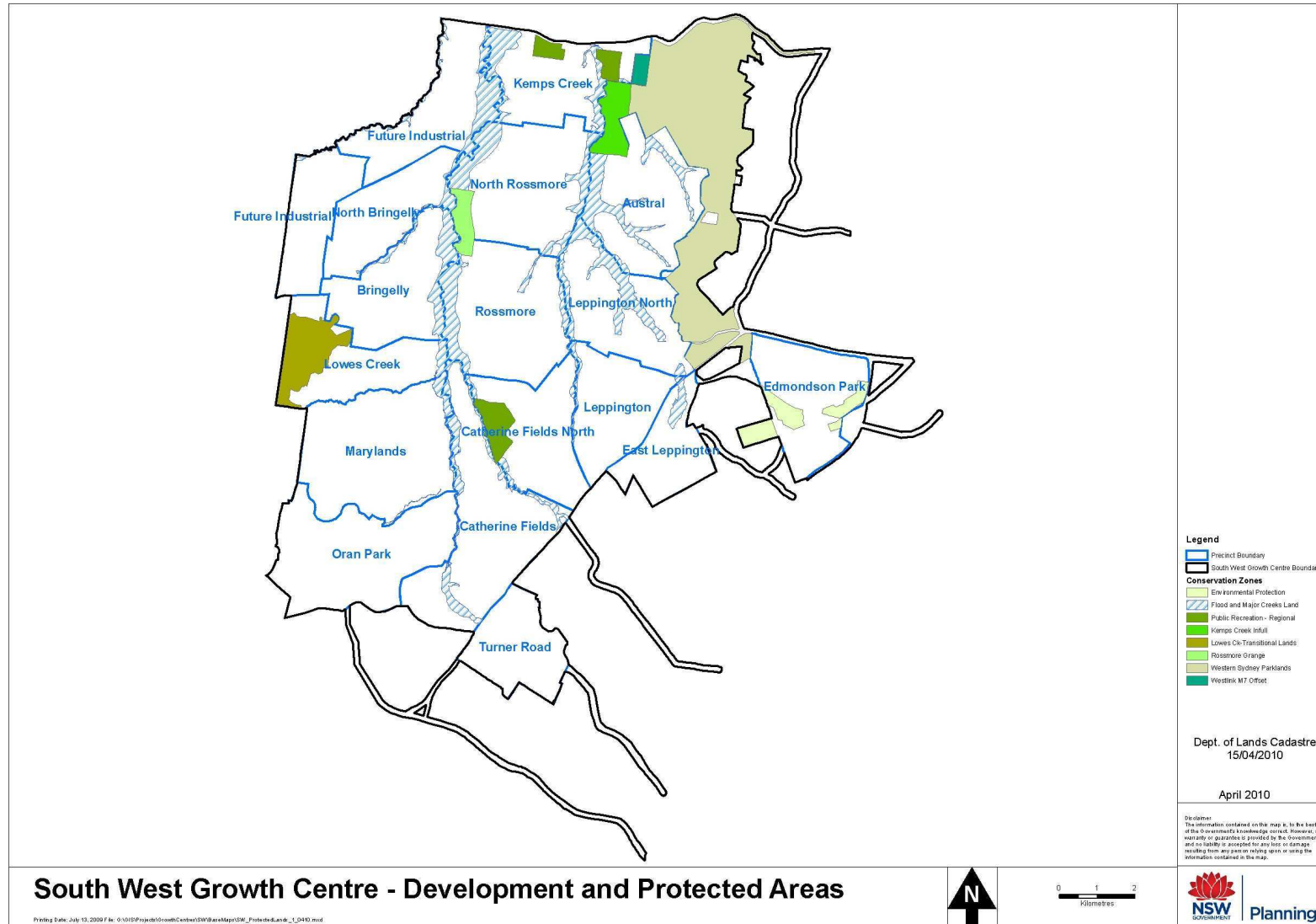


Figure 8: Indicative layout of development and protected areas within the South West Growth Centre

An overview of the indicative land use outcomes for each precinct is provided in Table 5. It should be noted that these outcomes are indicative and may vary according to the more detailed planning processes that are carried out for each precinct (described in Section 4). This has already occurred as part of the detailed planning for the Edmondson Park, Oran Park and Turner Road Precincts which have been rezoned.

Table 5: Land use outcomes for the South West Growth Centre

Precinct	Dwelling Target	Estimated Population	Centres and Employment	Lands zoned and to be acquired for environmental conservation
RELEASED AND REZONED PRECINCTS - Precinct Planning completed				
Edmondson Park	7,500	21,000	Town Centre Proposed Railway Station	Regional Park Protected Open Space
Oran Park	7,540	22,000	Town Centre Neighbourhood Centres 18 ha Employment Land	
Turner Road	4,020	12,000	Town Centre 96 ha Employment Land	
RELEASED PRECINCTS - Precinct Planning underway				
Austral	8,000	22,000	Town Centre Neighbourhood Centres Industrial/Employment Land	
Leppington North	12,000	33,000	Major Centre Neighbourhood Centres Proposed Railway Station	
PRECINCTS YET TO BE RELEASED – Precinct Planning not yet commenced				
Bringelly	5,000	14,000	Town Centre Neighbourhood Centres	
Catherine Fields	8,000	22,000	Town Centre Industrial/Employment Land Neighbourhood Centres	
Catherine Fields North	9,500	26,000	Town Centre Neighbourhood Centres Industrial/Employment Land	Public Recreation
East Leppington	3,000	8,000	Neighbourhood Centres	
Kemps Creek	1,000	2,500	Industrial/Employment Land	Public Recreation
Leppington	12,000	33,000	Neighbourhood Centres	
Lowes Creek	2,000	5,000	Neighbourhood Centres Industrial/Employment Land	
Marylands	9,000	25,000	Neighbourhood Centres Industrial/Employment Land	
North Bringelly	5,000	14,000	Town Centre Neighbourhood Centres	
North Rossmore	6,500	18,000	Town Centre Neighbourhood Centres	
Rossmore	9,000	25,000	Town Centre Neighbourhood Centres Industrial/Employment Land	

Transport infrastructure

Table 6 identifies new and upgraded transport infrastructure for the South West Growth Centre.

Table 6: Infrastructure in the South West Growth Centre

	Upgraded	New
Road	<ul style="list-style-type: none"> • Camden Valley Way • Cowpasture Road • Bringelly Road • Hoxton Park Road • Fifteenth Avenue • Denham Court Road • Raby Road • Campbelltown Road • Narellan Road • Northern Road • Elizabeth Drive • Edmondson Avenue • Western Road • Rickard Road • Ingleburn Road 	<ul style="list-style-type: none"> • Oran Park Link Road • Badgally Road Extension • Bringelly Link Road • Local roads within precincts
Rail		<p>Work on stage 1 of the South West Rail Link has commenced and stage 2 is expected to commence later in 2010 and be completed by 2016. The South West Rail Link will connect a station at the proposed Leppington Major Centre to Glenfield Station, via Edmondson Park. It will have the capacity to deliver thousands of workers to Parramatta and the City. A train stabling yard will also be built west of Leppington.</p>
Bus	<p>1000 new buses will be added to Sydney's bus network, increasing the size of the existing fleet by around 25% and delivering faster and more reliable services. This will include services for the South West Growth Centre.</p>	<p>A Bus Transitway connecting Liverpool with Parramatta has been constructed.</p> <p>Further strategic bus corridors have been planned within the South West Growth Centre and will be implemented by 2014. Proposed bus corridors in the South West Growth Centre will provide access to the proposed Major Centre and at Leppington and Leppington Station, supporting the use of the South West Rail Link.</p>