

4. Program implementation

The Growth Centres Program will be implemented via a statutory planning and infrastructure contribution framework. This section describes:

- the legislative framework that provides the legal basis for implementation;
- the planning tools and processes for achieving the desired outcomes;
- the biodiversity offset program; and
- the management and mitigation measures to be employed within the Growth Centres

4.1 LEGISLATIVE FRAMEWORK

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 4 and Figure 7). 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.

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.

4.2 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 13 and discussed in detail throughout 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.

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. Relevant extracts of the SEPP are provided at Appendix A.

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 5 and Figure 8). 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 of the Growth Centres.

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.

Flood prone and major creeks land

The Growth Centres SEPP identifies the flood prone and major creeks land within the Growth Centres (see Figure 5 and Figure 8). This land is located along important creek and riparian corridors and is within the 1 in 100 year flood level and for these reasons has limited development potential. These areas have been identified at a regional scale and may require further detailed analysis during precinct planning. The Growth Centres SEPP introduces development controls to retain and protect existing native vegetation within these areas. Until precinct planning is completed, the underlying LEP zone, which is usually rural, continues to apply alongside the additional vegetation clearing controls.

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.

In addition, further protection and enhancement of native vegetation within these areas will be addressed during the precinct planning. These are discussed in section 4.4.

Transitional Lands

The Growth Centres SEPP also identifies “transitional lands”. These areas are considered to be constrained by environmental factors including topography and significant vegetation and therefore are not considered suitable for extensive urban development. The SEPP introduces development controls to retain and protect existing native vegetation within these areas.

The SEPP requires consent to be granted for the removal of any native vegetation from properties within the transitional 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.

In addition, further protection and enhancement of native vegetation within these areas and other creeks and riparian corridors will be addressed during the precinct planning process.

Environmental Conservation and Public Recreation Zones

The Growth Centres SEPP has rezoned land environmental conservation or public recreation.

The objectives for the “environmental conservation” areas relate to the protection and restoration of areas of special ecological, scientific or aesthetic values and to conserve biological diversity, native vegetation corridors, aboriginal heritage, cultural values and scenic qualities. Any development within this zone is restricted and native vegetation is to be retained and protected.

The objectives of the “Public Recreation zones” (regional and local) are to enhance, restore and protecting the natural and cultural heritage values and to enable the land to be used for open space and recreational purposes that are consistent with the protection of natural and cultural values. These lands will be acquired by the NSW Government or relevant local council. The key difference between the two zones is the responsible acquisition authority.

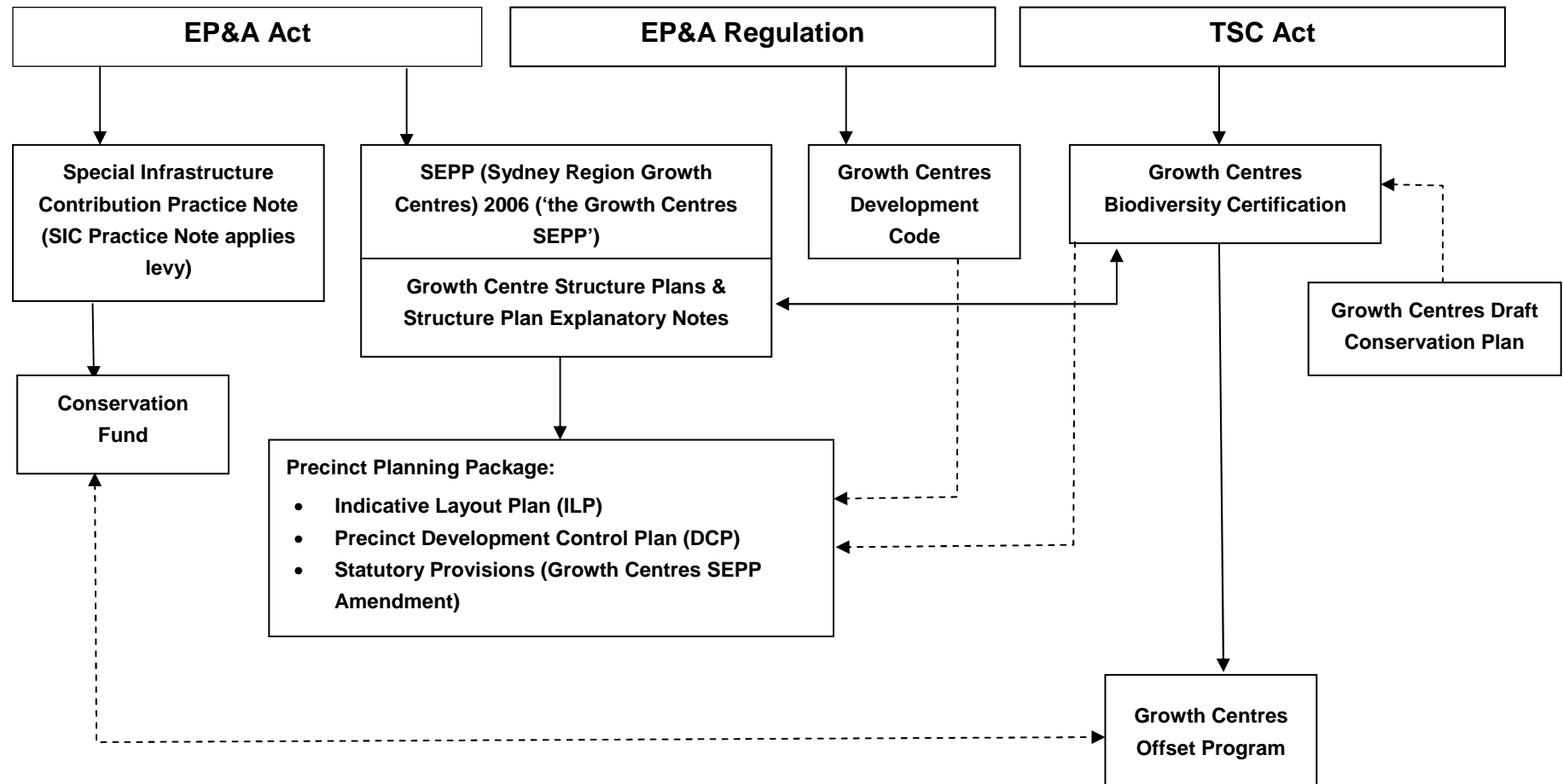


Figure 13: Planning Framework for the Growth Centres

As with the flood prone and major creeks land and transitional lands, the Growth Centres SEPP requires consent to be granted for the removal of any native vegetation from properties within the environmental conservation and public recreation zones. Before the consent authority can approve development in this area, it must be satisfied that the proposed impact on native vegetation is minimised and any loss is compensated to avoid any net loss.

Ultimately the precinct plans will be transferred from the Growth Centres SEPP to the relevant local environmental plan. Any proposed changes to a precinct plan will require approval of the NSW Minister for Planning whether or not the precinct plan is in the Growth Centres SEPP or an LEP.

Certification of the Growth Centres 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 (Refer to Appendix B). 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 14 and Figure 15 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.

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 4 and Figure 7). 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.

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.

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 17 provides a flow diagram of the precinct planning process.

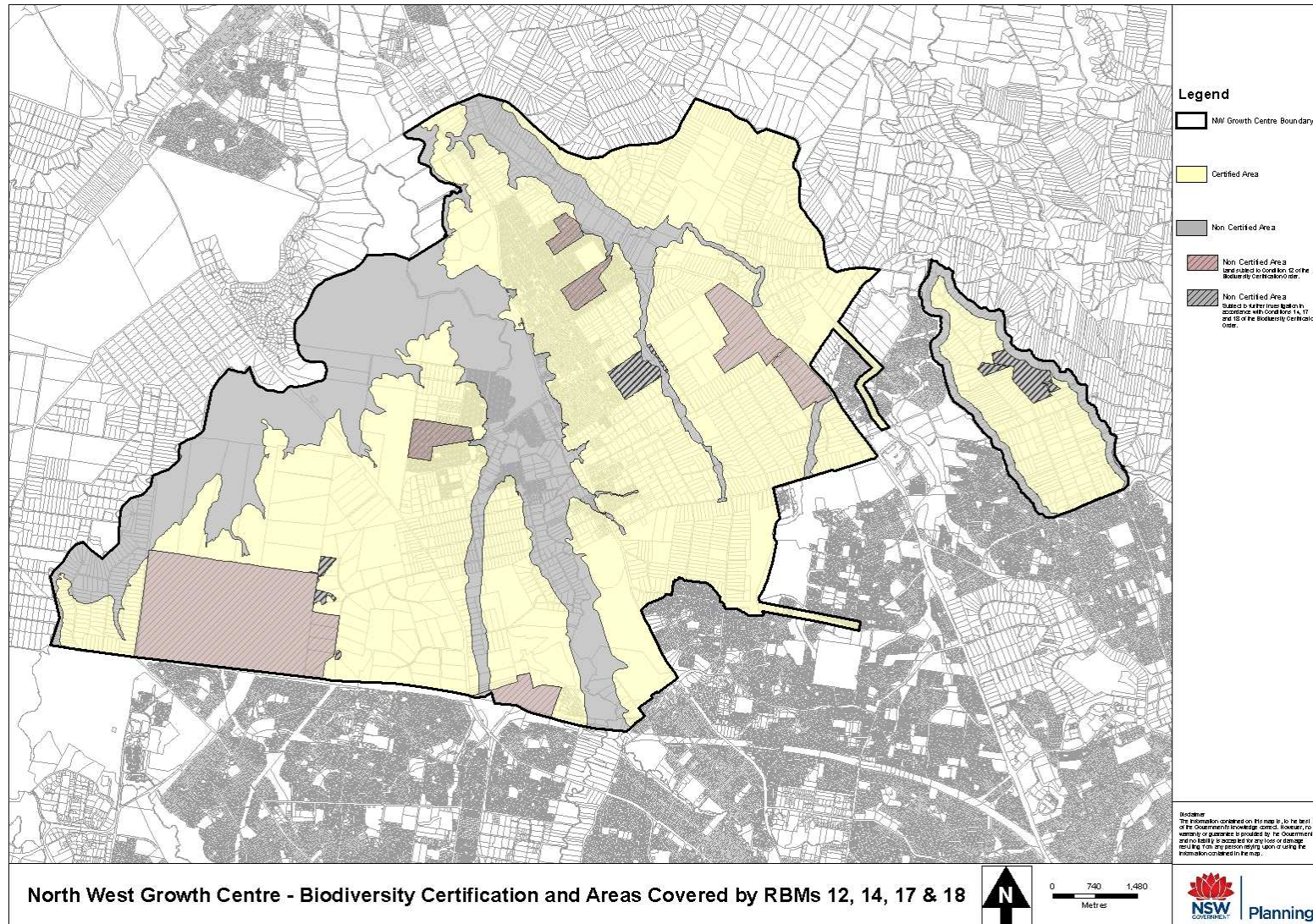


Figure 14: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18

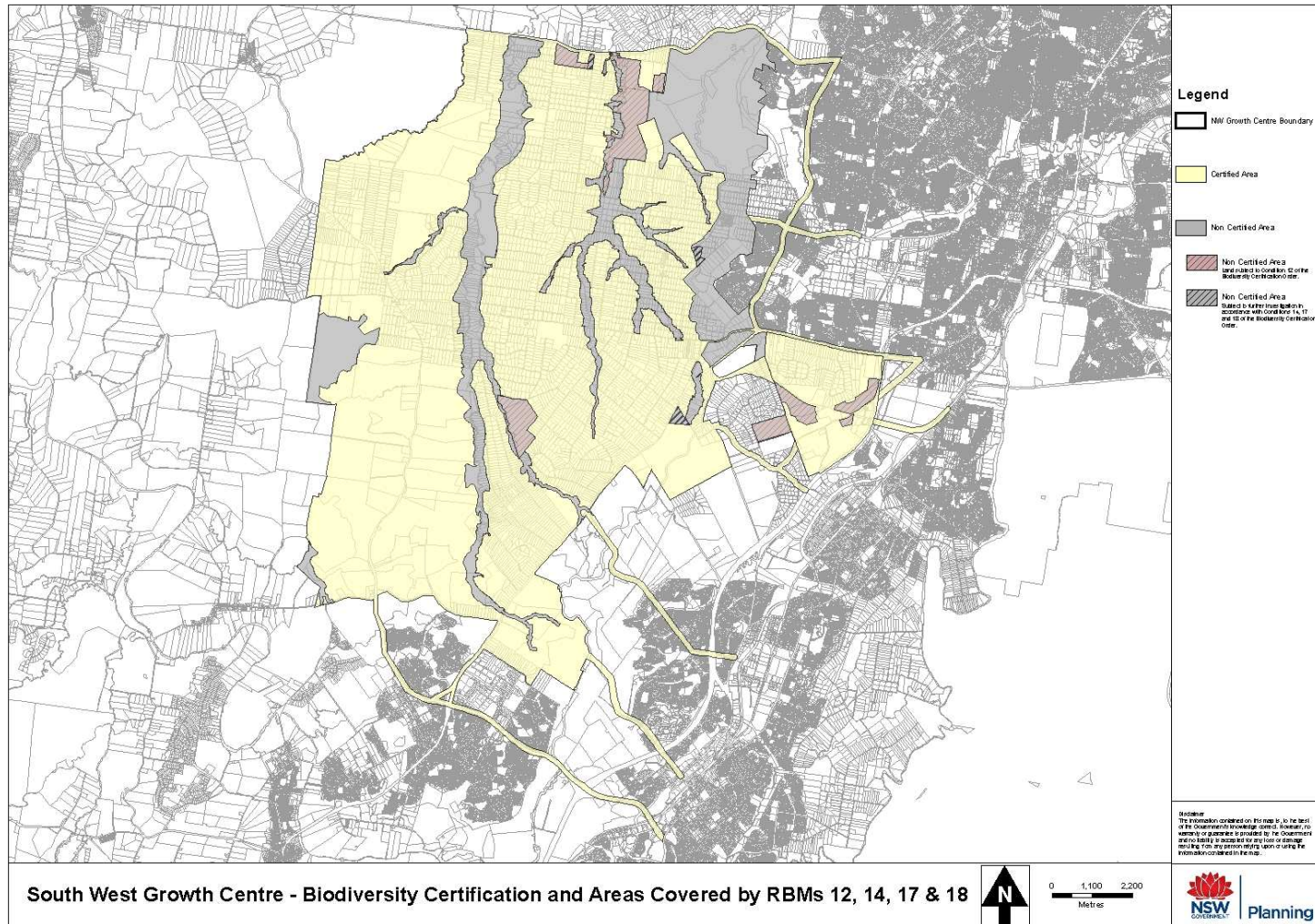


Figure 15: Biodiversity Certification and areas covered by RBMs 12, 14, 17 & 18

CASE STUDY

GROWTH CENTRES PRECINCT PLANNING

In December 2007, Oran Park and Turner Road Precincts in the South West Growth Centre were the first precincts rezoned. These precincts cover an area of approximately 1,655 ha and are estimated to provide 11,560 dwellings and accommodate 32,500 people. The precincts will potentially provide more than 9,000 jobs. Colebee Precinct in the North West and Edmondson Park Precinct in the South West were rezoned through local environmental plans prior to the adoption of the Growth Centres SEPP and the implementation of the precinct planning process, however they are part of the Growth Centres and the Program.

North Kellyville Precinct in the North West Growth Centre was rezoned in December 2008. It is approximately 707 ha and is estimated to provide a minimum of 4,500 dwellings and accommodate 14,200 people. Riverstone West Precinct, also in the North West, is approximately 285 ha and has the potential to provide for over 12,000 jobs. It is the first employment precinct to be rezoned in the North West and was completed in August 2009.

Precinct planning is well advanced for in four other precincts in the North West Growth Centre including: Riverstone Precinct (1,149 ha) which has the potential to provide for 9,000 dwellings; Alex Avenue (450 ha) which has the potential to provide for 6,300 dwellings; Marsden Park Industrial Precinct (551 ha) which has the potential to provide 10,000 jobs and 1,100 dwellings. The rezoning of these three precincts is expected to be finalised in 2010. Work on Area 20 Precinct is also underway and will be exhibited in 2010.

In October 2009, five additional precincts were released for urban development in the Growth Centres. They include Box Hill, Box Hill Industrial and Schofields Precincts in the North West and Austral and Leppington North Precincts in the South West. These precincts will provide for around 35,000 new dwellings, 240 ha of employment land and the proposed Leppington Major Centre. Precinct planning will commence in 2010.

Precinct Planning Package

The outcome of the precinct planning process is the precinct planning package which includes the following products:

Indicative Layout Plan (ILP)

The ILP provides the broad level design outcomes that test the feasibility of the development parameters and apply the findings of the environmental and urban form analysis undertaken as part of precinct planning. The ILP will inform the development of the statutory provisions, DCP and local infrastructure contributions plan (prepared by the relevant local council). The ILP ultimately forms part of the DCP and development within a precinct is required to comply with the ILP unless valid justification is given.

Precinct Development Control Plan (DCP)

The DCP provides detailed controls for the precinct and includes a written document with supporting maps and diagrams. Controls provided within the DCP correlate with the Precinct ILP, establishing development standards which proposed developments must address. Urban design requirements that are expected to be addressed, as well as other key issues that should be considered in the preparation of a DCP are established in the Growth Centres Development Code.

Statutory Provisions (“Precinct Plan”)

The statutory provisions are known as a “precinct plan” are included as an appendix to the Growth Centres SEPP.

Through developing the ILP, draft land use zones will begin to emerge. Statutory provisions are drafted by the NSW Government in consultation with the relevant Council. Statutory provisions include: maps (land zoning, height of buildings, lot size), land use tables, provisions relating to subdivision of land and other provisions including development standards and heritage provisions. Once finalised, these statutory provisions (precinct plans) are included in the Growth Centres SEPP and become the relevant development controls applying to all land within the precinct.

It should be noted that ultimately the precinct plan will be transferred from the Growth Centres SEPP to the relevant Council local environmental plan. This would be an administrative change only and must be approved by the NSW Minister for Planning.

CASE STUDY**NORTH KELLYVILLE PRECINCT**

The North Kellyville Precinct is located within the North West Growth Centre and is approximately 707 hectares. The vision for the precinct is to create vibrant neighbourhoods that provide a variety of housing types and opportunities for social interaction for a diverse population in centres, parks and community facilities. The Precinct Plan incorporates an integrated public transport, cycle and pedestrian network to facilitate improved access within the precinct and to surrounding areas.

The North Kellyville Precinct planning process involved the detailed planning of the precinct including further investigation of transitional lands, urban form and threatened species. This included a detailed biodiversity assessment which addressed the need to protect high quality vegetation by identifying protected lands as well as undertaking surveys and an assessment of existing native vegetation and threatened species, as identified in the Growth Centres Biodiversity Certification.

*The Biodiversity Certification Order requires adequate protection of existing native vegetation. In addition, adequate protection, such as through zoning and development controls, is also required to be provided for several threatened flora species recorded within and adjacent to Heath Road. The precinct contains six threatened flora species listed under the NSW TSC Act and the EPBC Act, being *Darwina biflora*, *Epacris purpurascens* var. *purpurascens*; *Eucalyptus* sp. *Cattai*; *Hibbertia superans*; *Leucopogon fletcheri* subsp. *fletcheri*; and *Persoonia hirsuta*. The North Kellyville Precinct was rezoned through a SEPP amendment to the Growth Centres SEPP in December 2008. The precinct is estimated to provide a minimum of 4,500 dwellings. The Precinct Plan (SEPP Amendment) establishes zoning controls and associated statutory provisions for the precinct, including provisions relating to flood prone land, biodiversity and environmental significance.*

The Precinct Plan includes provisions to facilitate the protection and conservation of environmentally sensitive areas through the use of E3 Environmental Management and E4 Environmental Living zones and acquisition of flood prone and other open space land along the riparian corridors. These areas include areas of geographical constraints associated with the riparian corridors of Cattai Creek and Smalls Creek and the steep topography along parts of Cattai Creek, together with significant high quality vegetation coverage and were originally identified under the Growth Centres SEPP as “transitional land”. The E3 Environmental Management zone has been used to identify constrained land where native vegetation must be retained and there is limited development potential. The E4

Environmental Living zone includes controls that aim to provide low-impact residential development in areas with special ecological, scientific or aesthetic values. The Precinct Plan also establishes minimum lot size and maximum density controls on E4 zoned land to achieve long term conservation measures.

The North Kellyville Precinct Plan also includes other controls applying to existing native vegetation areas including consideration of the impact on the disturbance of native vegetation, controls to ensure development is consistent with the North Kellyville Precinct Environmental Management Plan and controls relating to subdivision within the E4 zone to encourage development that will provide for the management and conservation of land in a holistic and sensitive manner. Overall, the Precinct Plan provides for the protection of 35.06 hectares of Existing Native Vegetation.

Along with the North Kellyville SEPP Amendment, a North Kellyville DCP was also adopted. The DCP contains the Indicative Layout Plan (ILP) for the precinct, which details the land use layout, roads, access points and biodiversity corridors (Figure 16).

The DCP establishes objectives and controls for the environmental management of the precinct. It includes controls for the subdivision and lot development for large lots within the E4 Environmental Living zone. The DCP also requires a vegetation management plan to be prepared with any subdivision proposal for land within the E3 or E4 zone as well as consistency with the North Kellyville Precinct Environmental Management Plan. The DCP further protects environmentally sensitive land by requiring a covenant to apply to all newly created lots within the E3 and E4 zones that requires the maintenance and management of native vegetation as identified in the Precinct Plan.



Figure 16: North Kellyville Indicative Layout Plan

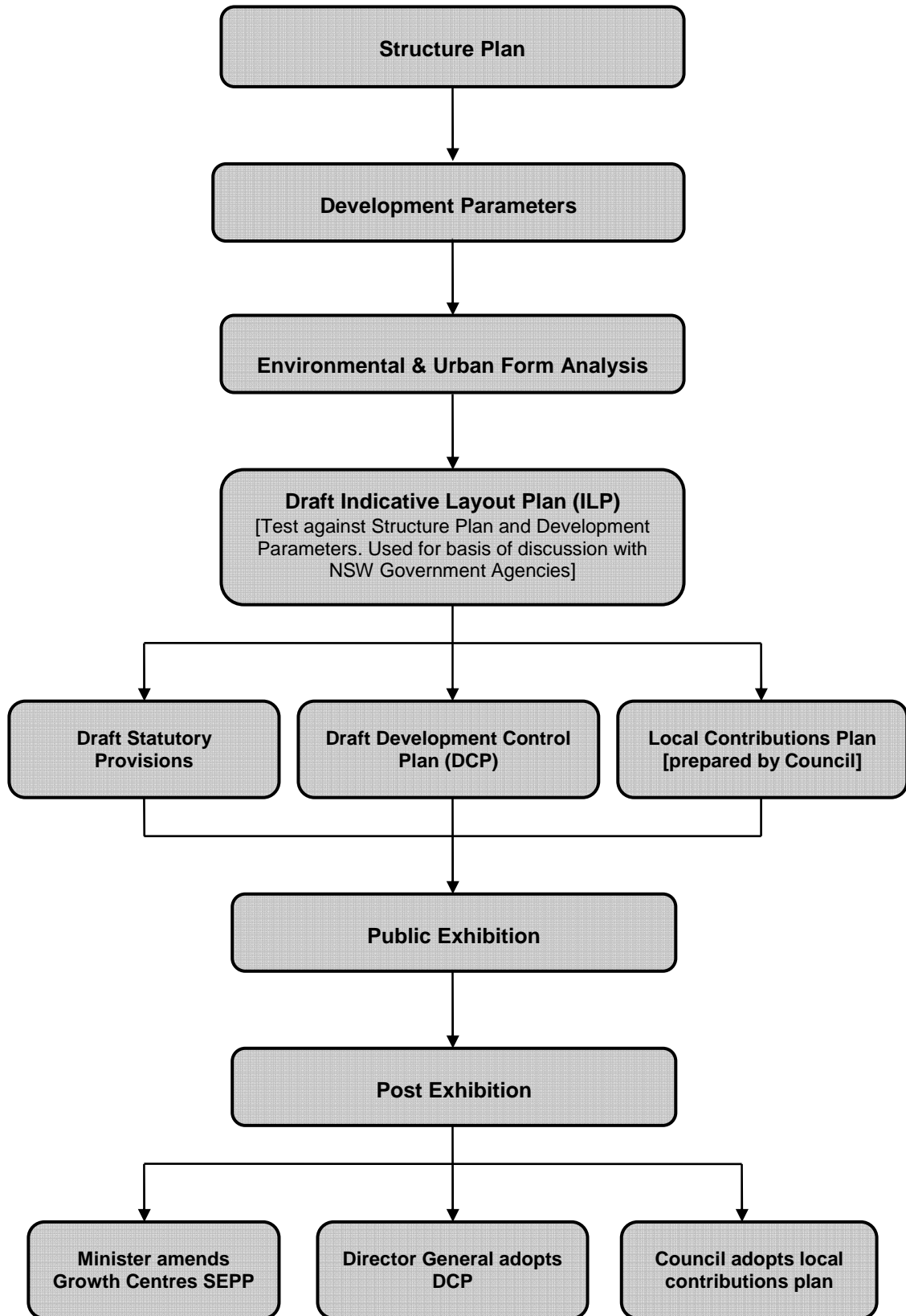


Figure 17: Flow diagram of Precinct Planning

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.

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 Table 7). These policies apply at different stages in the development process, including strategic planning, development assessment and construction phases.

Table 7: Other policies applying to the Growth Centres

ISSUE	STATUTORY	NON STATUTORY
	Acts, Regulations and EPIs	Policy and Guidelines
Land use planning, including urban design and transport planning	<ul style="list-style-type: none"> • <i>Environmental Planning and Assessment Act 1979</i> • <i>Land Acquisition (Just Terms Compensation) Act 1991</i> • Growth Centres SEPP • Seniors Housing SEPP • Infrastructure SEPP • Affordable Rental Housing SEPP • BASIX SEPP • Exempt & Complying Codes SEPP • SEPP 65 – Design Quality of Residential Flat Buildings 	<ul style="list-style-type: none"> • Metropolitan Strategy • Draft North West & South West Subregional Strategies • NSW State Plan • State Infrastructure Strategy • Growth Centres Development Code • BASIX – Building Sustainability Index (2004) • The Right Place for Business and Services - Planning Policy (2001) • Improving Transport Choice - Guidelines for Planning and Development (2001) • Development Near Rail Corridors and Busy Roads - Interim Guideline (2008) • Crime prevention and the assessment of development applications (2001) • Residential Flat Design Code (2002) • Residential Flat Design Pattern Book (2001)

ISSUE	STATUTORY	NON STATUTORY
	Acts, Regulations and EPIs	Policy and Guidelines
Non Indigenous Heritage and Aboriginal Cultural Heritage	<ul style="list-style-type: none"> • <i>Heritage Act 1977</i> • <i>National Parks and Wildlife Act 1974</i> • NSW State Heritage Register 	<ul style="list-style-type: none"> • NSW Heritage Manual (1996) • Assessing Heritage Significance (2001) • Protocol for Aboriginal Stakeholder Involvement in the Assessment of Aboriginal Heritage in the Sydney Growth Centres (2006) • Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres (2006)
Biodiversity	<ul style="list-style-type: none"> • <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> • <i>Threatened Species Conservation Act 1995</i> • <i>Biodiversity Certification Order</i> 	<ul style="list-style-type: none"> • <i>Growth Centres Conservation Plan (2007)</i> • <i>Threatened Species Assessment Guidelines (2007)</i> • <i>Guidelines for Developments Adjoining Department of Environment and Climate Change Land (2008)</i> • <i>Best Practice Guidelines Green and Golden Bell Frog Habitat (2008)</i>
Bush fire	<ul style="list-style-type: none"> • <i>Rural Fires Act 1997</i> • <i>Rural Fires Regulation 2008</i> 	<ul style="list-style-type: none"> • <i>Planning for Bush Fire Protection (2006)</i>
Contamination	<ul style="list-style-type: none"> • <i>Contamination Land Management Act 1995</i> • <i>SEPP 55 Remediation of Land</i> • <i>Protection of the Environment Operations Act 1997</i> 	<ul style="list-style-type: none"> • <i>Managing land contamination – Planning Guidelines (2005)</i> • <i>EPA Contaminated Sites: Sampling Design Guidelines (1995)</i>
Land capability including flood prone land, stormwater management	<ul style="list-style-type: none"> • <i>Water Management Act 2000</i> • <i>Water Act 1912</i> • <i>Catchment Management Authorities Act 2003</i> 	<ul style="list-style-type: none"> • <i>Acid Sulfate Soils Planning Guidelines (1998)</i> • <i>The Blue Book - Managing Urban Stormwater: Soils and Construction (2004)</i> • <i>Building in a Saline Environment, DECC (2007)</i> • <i>NSW Floodplain Development Manual (2005)</i> • <i>Managing Urban Stormwater: Harvesting and Reuse (2006)</i>
Noise	<ul style="list-style-type: none"> • Infrastructure SEPP 	<ul style="list-style-type: none"> • <i>Environmental criteria for road traffic noise (1999)</i> • <i>NSW Industrial Noise Policy (2001)</i> • <i>Development Near Rail Corridors and Busy Roads - Interim Guideline (2008)</i>

ISSUE	STATUTORY	NON STATUTORY
	Acts, Regulations and EPIs	Policy and Guidelines
Odour	<ul style="list-style-type: none"> • <i>Protection of the Environment Operations Act 1997</i> 	<ul style="list-style-type: none"> • <i>Assessment and Management of Odour from Stationary Sources in NSW - Technical Framework (2006)</i> • <i>Assessment and Management of Odour from Stationary Sources in NSW - Technical Notes (2006)</i> • <i>Draft NSW Best Practice Odour Guideline – Sewerage Systems (2010)</i>
Riparian Lands including Aquatic Environments	<ul style="list-style-type: none"> • <i>Water Management Act 2000</i> • <i>Fisheries Management Act 1994</i> 	<ul style="list-style-type: none"> • <i>Policy and Guidelines for Aquatic Habitat & Fish Conservation (1999)</i> • <i>Policy and Guidelines for Fish Friendly Waterway Crossings (2004)</i> • <i>Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2003)</i> • <i>NSW State Rivers and Estuaries Policy</i> • <i>NSW Wetlands Management Policy</i> • <i>NSW Groundwater Policy Framework Document – General</i> • <i>Managing Urban Stormwater: Soils and Construction, Landcom (2004)</i> • <i>Riparian Corridor Objective Mapping for the NW and SW Growth Centres, DNR (2006)</i> • <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> • <i>Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings.</i>

4.3 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.

Governance Arrangements

The Biodiversity Certification requires this funding to be allocated annually at the same rate at which development is expected to occur within the Growth Centres. Funding for the Program is allocated to the NSW Environmental Trust, which then provides an annual grant to the DECCW. A review of the Program in 2011 will consider the ongoing suitability of these financial arrangements and the Program's progress in delivering the planned biodiversity offsets.

The governance of the Offset Program is shown in Figure 18. The Conservation Fund is administered by NSW Treasury. Each year the NSW Treasury allocates a portion of the Conservation Fund, based on lot projections, to the NSW Environmental Trust

The NSW Environmental Trust is an independent statutory body established by the NSW Government, it is empowered under the *Environmental Trust Act 1998* to administer funding arrangements for environmental restoration, rehabilitation, research and education.

The Trust has five members: the NSW Minister for Climate Change and the Environment (Chair); the Secretary of the Treasury; the Director General of DECCW; a nominee of the NSW Nature Conservation Council; and a nominee of the Local Government and Shires Associations.

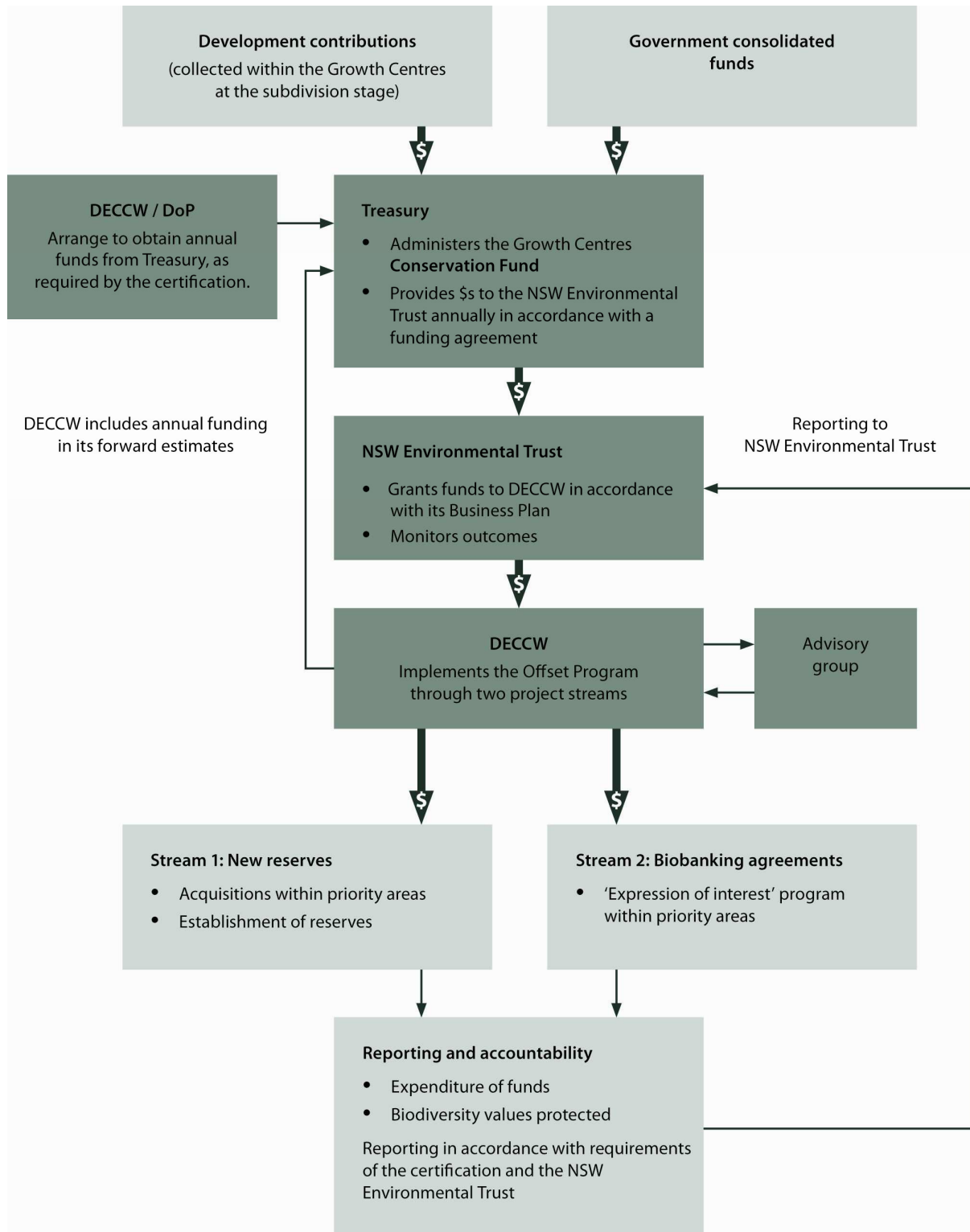


Figure 18: Administration of offset funds and program structure

Funding for the Offset Program is allocated each year by the Environmental Trust to the DECCW in accordance with an approved business plan. The available funding is spent by DECCW on an annual basis for the purposes specified in the Certification. In summary, these purposes are to:

- acquire land for addition to the public reserve system (RBM 23),
- establish conservation agreements on private land (RBM 23),
- provide for the initial management costs of purchased land (RBM 24), and
- provide for the administration costs for purchasing land and/or entering into conservation agreements (RBM 24).

DECCW also has reporting responsibilities in accordance with requirements of the certification and the Environmental Trust.

An Advisory Group has also been established to provide over-arching guidance for the implementation of the Offset Program. The representatives on this group include DECCW, DoP, NSW Treasury, Hawkesbury Nepean Catchment Management Authority, DEWHA and the Environmental Trust. The role of the advisory group is to:

- provide over-arching guidance for the implementation of the Offset Program
- provide advice on the evaluation and prioritisation of lands nominated for acquisition or biobanking agreements.
- advise on matters requiring referral to the Environmental Trust for endorsement; and
- provide advice on the actions required to achieve the Offset Program's outcomes.

Application of the Offset Program and method for identifying offset areas

The focus areas for the Offset Program are specified in the Biodiversity Certification. These areas are shown in Figure 9. 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 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 10). 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 2008).

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.

The methodology is described in detail in DECC 2008.

Implementation Mechanisms

The Offset Program’s funding is proposed to be spent using the following implementation mechanisms. The Advisory Group provides over-arching guidance for the implementation of the Offset Program.

Reserve acquisition

Reserve acquisition is the highest priority for the Program in instances where a property has suitable conservation values and is of sufficient size or adjoins an existing reserve. It is anticipated that most of the new reserves will be nature reserves or national parks. If a suitable property is available for purchase, DECCW will assess the priority of the purchase and, if warranted, will proceed with the acquisition in accordance with its Reserve Establishment Guidelines (DECC 2007).

Reserve establishment

The Biodiversity Certification enables funds to be used for the initial management costs of purchased land. Funding will be provided over the first five years following the acquisition of new reserves in order to manage threats to biodiversity values. Funding over a longer period may be warranted if establishment actions are not completed in the first five years. Ongoing reserve management funding after the initial establishment period will be the responsibility of DECCW. Costs may include preparing and implementing an interim management plan for the acquired land, fencing, managing weeds, removing rubbish and formalising access. The proportion of the Conservation Fund that can be used for Reserve establishment is limited by RBM 24 of the Certification.

Biobanking agreements with existing landowners

Conservation agreements are a priority for properties that have suitable conservation values but are too small to be managed as a public reserve or for properties where the landowner is not interested in selling. The preferred conservation agreement for use in the Program is a biobanking agreement established under Part 7A of the NSW TSC Act. Biobanking agreements are in perpetuity and provide a relatively high level of statutory security and also provide funding for ongoing management and monitoring of the site. Other types of conservation agreements could also be used by the Program.

CASE STUDY**CRANEBROOK – PROPOSED NEW RESERVE**

In 2008-09, \$2.84 million of funding from the Growth Centres Biodiversity Offset Program was committed towards the purchase of a 181 ha property at Cranebrook, near Penrith and just west of the North West Growth Centre. This is the first acquisition under the Offset Program.

The total cost of the property was \$17.5 million, with 2/3 of this amount coming from a “Caring for Our Country” grant from the Commonwealth Government. This amounts to about \$100,000 per hectare with more required for initial reserve establishment. The property is of high conservation value, as it contains the upper catchment area of Rickabys Creek and a mosaic of vegetation types associated with ancient alluvial deposits. It has an important role in providing landscape connectivity in this part of the Cumberland Plain. It is strategically located in respect to other reserves and has fragmented connectivity with Agnes Banks Nature Reserve, Castlereagh Nature Reserve and Wianamatta Regional Park.

*The property contains some of the best remaining Cumberland Plain vegetation in Western Sydney, including significant populations of rare and threatened plants. In terms of matters of national environmental significance, the site includes populations of: *Dilwynia tenuifolia*; *Micromyrtus minutiflora*; *Persoonia hirsuta*; *Persoonia nutans*; and *Pultenaea parviflora*. It will become a new reserve under the NSW National Parks and Wildlife Act 1974.*

This acquisition demonstrates that numerous small losses within the Growth Centres can contribute towards a substantial conservation gain.

The Growth Centres Biodiversity Offset Program will also contribute to funding management of the site for an initial 5 year period. Following the establishment phase, management funds will come from DECCW’s annual park management allocation.

Growth Centres Biodiversity Certification Criteria		Conservation Outcome
Total area of land reserved		181 hectares
Does the land meet RBM 32 of the Biodiversity Certification in terms of preferred location?		Land is within the area of first preference.
Vegetation communities to be reserved	Cooks River/Castlereagh Ironbark Forest Endangered Ecological Community (EEC)	41.2 ha
	Castlereagh Scribbly Gum Woodland	66.1 ha
	Shale Gravel Transition Forest (EEC)	3.5 ha
	Castlereagh Swamp Woodland (EEC)	50.3 ha
	Cleared land to be re-vegetated	20 ha

CASE STUDY

ST MARY'S TOWERS BIOBANK SITE

The St Mary's Towers property is located on the Nepean River near Douglas Park in south-western Sydney (Figure 19). It lies within the Cumberland subregion of the Sydney Basin Bioregion. The total property covers 546 ha of which 346 ha is vegetated. The vegetation on the property is dissected by the South-Western Freeway, although some ecological connectivity between the two parts of the property is retained along Allens Creek gully which passes below the freeway.

The St Mary's Towers biobank site was established in May 2010 and is the first biobank site in NSW. It protects 80 ha of high conservation value land, including most of the critically endangered Cumberland Plain Woodlands on the property. The total cost of the agreement, which has been funded through Growth Centres Offset Program, is \$1.7 million or about \$20,000 per hectare.

The conservation area is an excellent example of the natural transition between shale derived ridge-top woodlands and sandstone gully forests in the southern Cumberland Plain. The conservation area increases the protected area of two NSW and Commonwealth listed threatened ecological communities: the critically endangered Cumberland Plain Woodlands (36 ha) and the endangered Shale Sandstone Transition Forest (33 ha). Sydney Hinterland transition woodland and hinterland sandstone gully forest are also present.

The property forms part of a continuous band of vegetation along the Nepean and Cataract Rivers and associated creeks. The area was identified as being of high significance for fauna in an assessment of priority forest blocks on the Cumberland Plain.

The property contains both sandstone gorge and shale ridge-top habitats. The fauna habitat value of the ridge-top woodland is currently depleted as a consequence of current management practices i.e. the removal of shrub species and fallen timber. These habitats will regenerate well with minimum management intervention once the conservation area is established.

Four threatened fauna species were recorded during an assessment of the property:

- Cumberland Land Snail (*Meridolum corneovirens*) – endangered (NSW);
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – vulnerable (NSW & Commonwealth);
- Large-eared Pied Bat (*Chalinolobus dwyeri*) - vulnerable (NSW & Commonwealth); and
- Little Lorikeet (*Glossopsitta pusilla*) - vulnerable (NSW).

Other threatened species that may occur on the site or which are likely to return once the ridge-top habitats are restored include the Commonwealth and NSW listed Swift Parrot and Broad-headed Snake, as well as the NSW listed Powerful Owl, Brown Treecreeper, Diamond Firetail, Large-footed Myotis, Eastern Bentwing-bat, Glossy Black Cockatoo, Black-chinned Honeyeater, Koala, Gang Gang Cockatoo, Eastern Freetail-bat, and the Greater Broad-nosed Bat.

The biobank site is protected in-perpetuity and will be actively managed. The landowner is funded each year to ensure that grazing is excluded and fences maintained. In addition, funding is provided for in-perpetuity weed management, feral animal control and ecological burns. This is particularly significant given the vulnerability of the vegetation to invasive weeds. The successful negotiation of the biobanking agreement, demonstrates that the Growth Centres Offset Program can deliver significant conservation outcomes on the Cumberland Plain.

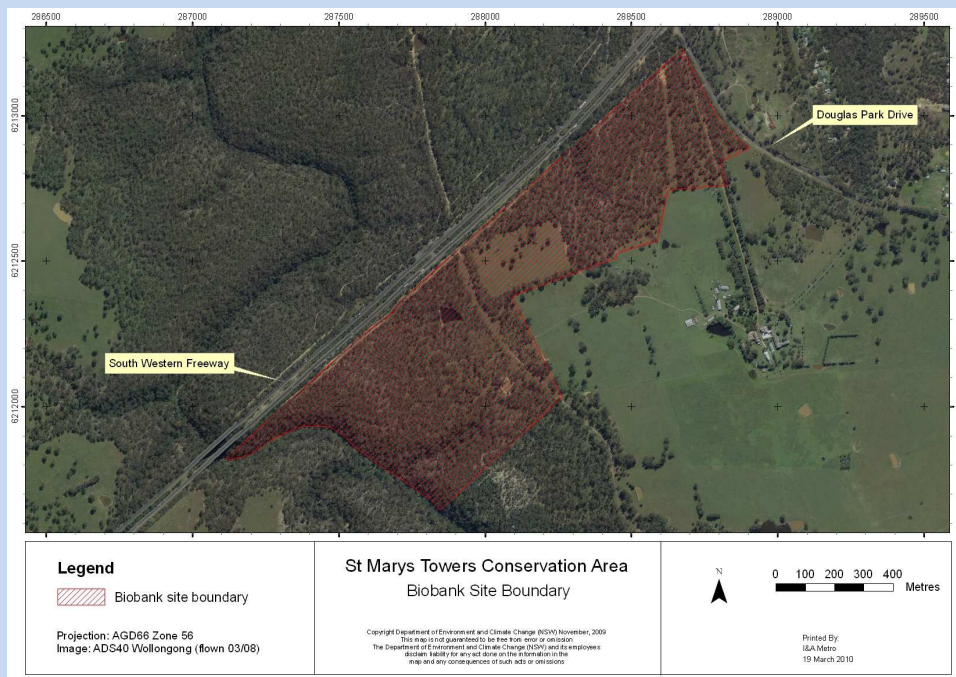


Figure 19: St Mary's Towers Location Map

CASE STUDY

PORT MACQUARIE, CAPERTEE VALLEY – PROPOSED NEW RESERVE

While not part of the Growth Centres Offset Program, the recent acquisition in the Capertee Valley illustrates the value for money which can be obtained from seeking conservation outcomes in grassy woodlands in the broader Sydney Basin Bioregion, when offsets in the Cumberland Plain cannot be found or are several fold more costly. The DECCW is in the process of purchasing the property known as “Port Macquarie”, for the establishment of a reserve under the NSW *National Parks and Wildlife Act 1974*.

The property “Port Macquarie” totals 2,845 ha and the proposed new reserve is situated in the Capertee Valley approximately 50 kilometres north of the Lithgow. The landscape is one of undulating hills and protected valleys along Ulumbra and Oaky Creeks and the Capertee River within an altitude range of 400 – 1,000 metres.

It lies within the Sydney Basin Bioregion. The proposed new reserve borders the northern boundary of the proposed Mt Airly reserve which directly abuts the Gardens of Stone National Park which adjoins the Wollemi National Park.

The property was valued at approximately \$1,500 per hectare. When compared to the St Marys Towers biobank site and the Cranebrook site described in the two previous case studies, the proposed “Port Macquarie” reserve demonstrates the cost and conservation advantages of seeking offsets in the broader Sydney Basin Bioregion.

The reserve will protect at least 700 ha of the Commonwealth EPBC Act listed threatened ecological community White Box, Yellow Box, Blakely’s Red Gum Grassy Woodland and Derived Native Grassland, most of which is in very good condition, and a wide variety of other forest and woodland communities. The threatened EPBC Act listed plant *Grevillia obtusiflora* subsp. *fecunda* also occurs on the property.

The forests and woodlands of the Capertee Valley provide very important habitat to threatened and declining woodland birds and has been identified as an Important Bird Area by Birds Australia having very high conservation significance for birds within Australia and the globe. Several threatened species of woodland birds are known to breed in the valley, in particular the endangered Regent Honeyeater (EPBC Act), for which the total population is thought to be less than 2,000 individuals. The Capertee Valley is one of the core breeding areas for this species in Australia and the “Port Macquarie” property, which includes more than 12 kilometres of riparian River Oak habitat along the Capertee River, is a known breeding area.

188 species of native vertebrates have been recorded within the proposed reserve and adjacent lands comprising four frogs, seven reptiles, 165 birds and 12 mammals. These include Commonwealth listed Regent Honeyeater, Swift Parrot, Spotted Tailed Quoll and Large-eared Pied Bat. Other threatened species under the NSW TSC Act include, the Square-tailed Kite, Gang-gang Cockatoo, Glossy Black-Cockatoo, Turquoise Parrot, Barking Owl, Brown Treecreeper, Speckled Warbler, Black-chinned Honeyeater, Hooded Robin, Grey-crowned Babbler (eastern subspecies), and Diamond Firetail. The threatened Tiger Quoll is nearing the western limit of its distribution. Species of regional significance include the Plum-headed Finch, Southern Whiteface and Rock Warbler.

4.4 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 5). 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 5) and two in the South West Growth Centre (Figure 8). 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 5). 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 2005) 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 Shale Woodlands and Shale Gravel Transition Forest 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 CPW values through the retention of trees; maintenance of the existing native understory and locating passive and active facilities cognisant of existing CPW 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 5 and Figure 8). 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.