



Environment,
Climate Change
& Water



Growth Centres Biodiversity Offset Program
Annual Report 2008–09

*Protecting some of the best remaining bushland in
Western Sydney and the surrounding region*

Abbreviations

DECCW	Department of Environment, Climate Change and Water NSW
DoP	NSW Department of Planning
EEC	endangered ecological community
HNCAP	Hawkesbury–Nepean Catchment Action Plan
HNCMA	Hawkesbury–Nepean Catchment Management Authority
NP&W Act	<i>National Parks & Wildlife Act 1974</i>
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006</i>
TSC Act	<i>Threatened Species Conservation Act 1995</i>

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Foreword

In Western Sydney, striking a balance between urban growth and environmental protection is a major challenge. Sydney continues to experience a high demand for the supply of affordable housing and employment opportunities. However, past growth has come at an environmental cost, with about 75% of the original vegetation in Western Sydney being cleared.

Planning for the next 30 years of urban growth in Western Sydney provides an opportunity to approach things differently. For the first time in NSW, urban growth has been planned in a way that also improves and maintains biodiversity values. This approach has culminated in a \$530-million Conservation Fund being established by the NSW Government to protect some of the areas of highest environmental value. While vegetation clearing will be necessary for Sydney's future housing, it will be counterbalanced by a continued increase in the area of national parks and other protected lands in the Sydney region. These areas will become the breathing space for Sydney's future residents. They will also provide a permanent network of refuges for our unique fauna and flora.

The Growth Centres Biodiversity Offset Program is part of this innovative solution. The Program began in 2008 and has already contributed a major conservation gain – the acquisition of a new reserve at Cranebrook, near Penrith. This property of just over 180 hectares in size is a treasure trove of threatened and endangered vegetation. It provides a large conservation area in Western Sydney in exchange for the loss of smaller and less viable fragments within planned urban areas.

The Program will grow over the coming years, and reporting on the use of funds is important in assuring the public that they are being well spent. I therefore have great pleasure in presenting the first Annual Report for the Growth Centres Biodiversity Offset Program.

Lisa Corbyn

Director General

Micromyrtus minutiflora (endangered), DECCW



Executive summary

The Growth Centres Biodiversity Offset Program aims to permanently protect some of the best remaining bushland in Western Sydney and surrounding regions. It will do this by voluntarily acquiring land for new reserves and by funding the establishment of biobanking agreements with landowners.

The Program was established in 2008 as part of the biodiversity certification of the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (referred to as the Growth Centres SEPP). The Growth Centres SEPP establishes the broad framework for releasing an estimated 180,000 new housing lots in Western Sydney.

The Growth Centres SEPP was the first planning instrument in NSW to obtain biodiversity certification under the *Threatened Species Conservation Act 1995*. Certification 'switches off' the need to undertake further threatened species assessments at the development stage. This strategic decision early in the planning process streamlines development decisions, saving costs and time, while securing biodiversity outcomes.

The Program is part of a package of conservation measures, delivered by the NSW Government, which will offset the impacts on biodiversity that will occur as the Growth Centres are developed over the next 30 to 40 years.

Funding for the Program will be allocated annually to the NSW Environmental Trust – at the same rate at which development is expected to occur within the Growth Centres. The total funding for the Program is \$397.5 million (in 2005–06 dollar values). This amount will be indexed based on future increases in land values within the Growth Centres.

This 2008–09 Annual Report is provided in accordance with the requirements of the biodiversity certification. Its purpose is to report on the amount of vegetation cleared within the Growth Centres, the funding provided, amounts expended, conservation outcomes and predicted funding for the next ten years.

As this is the Program's first Annual Report, information is also provided on the Program's background, including its goals and key stakeholders. This report also outlines the area of operation and the method used to identify priority areas for potential investment of Program funds.

1. Growth Centres Biodiversity Offset Program

This section describes the background to the Program and the Program goals and outcomes. The Program's links to other projects and key stakeholders are also identified.

1.1 Program background

The Growth Centres Biodiversity Offset Program was established in 2008 as part of a package of conservation measures, delivered by the NSW Government, to offset the impacts on biodiversity that will occur as Sydney's North West and South West Growth Centres are developed.

An estimated 180,000 housing lots will be released in the North West and South West Growth Centres of Western Sydney over the next 30 to 40 years. The Growth Centres SEPP was gazetted in 2006 to provide a planning framework for this development.

The Growth Centres SEPP was granted biodiversity certification in December 2007. The Minister for the Environment may grant biodiversity certification to an environmental planning instrument under s.126G of the *Threatened Species Conservation Act 1995* (TSC Act) if he or she is satisfied there will be an overall improvement or maintenance of biodiversity values. The certification was also enacted through an amendment to the TSC Act in 2008.

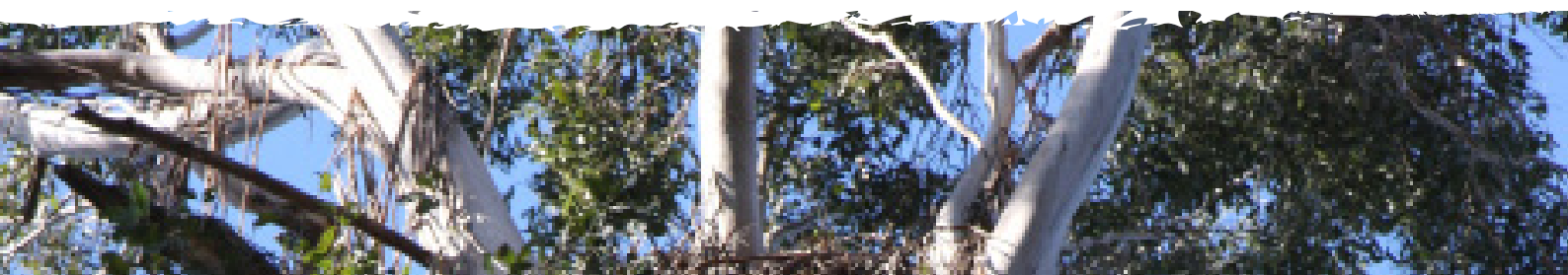
The purpose of certification is to resolve biodiversity issues early in the planning process so that the subsequent release of land can proceed without the need to undertake further threatened species assessments at the development stage. This provides for a more streamlined and cost effective land release process than that available under current regulatory practice.

Certification also enables the NSW Government to be more strategic in meeting its goals for biodiversity conservation. It is a move away from the 'death by a thousand cuts' scenario for biodiversity in which site-focused decisions are made in isolation and late in the development process.

The biodiversity measures applying to the certification relate to:

- protecting 2,000 hectares of high quality vegetation within the Growth Centres, and
- establishing a \$530-million Conservation Fund (in 2005–06 dollar values and subject to indexing) over a 30 to 40 year period. This funding is derived in part from a special infrastructure contribution applying to development within the Growth Centres and in part from general government revenue.

Eucalyptus moluccana, one of the dominant Eucalypt species in Cumberland Plain Woodland, DECCW



Of the \$530 million in conservation funding:

- \$132.5 million (25%) is for expenditure within the Growth Centres to purchase areas of land identified in the Growth Centres SEPP. The acquisition of land and authority for long-term management of these lands is being resolved by the NSW Department of Planning (DoP).
- \$397.5 million (75%) of the funding is for expenditure outside the Growth Centres, targeting the largest and best vegetation remnants for reservation or conservation agreements (including biobanking agreements, i.e. agreements made with landowners under the NSW Government's Biodiversity Banking and Offsets Scheme).

The \$397.5 million component allocated for expenditure outside the Growth Centres provides the funding source for the Growth Centres Biodiversity Offset Program.

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 Department of Environment, Climate Change and Water NSW (see Figure 1). 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.

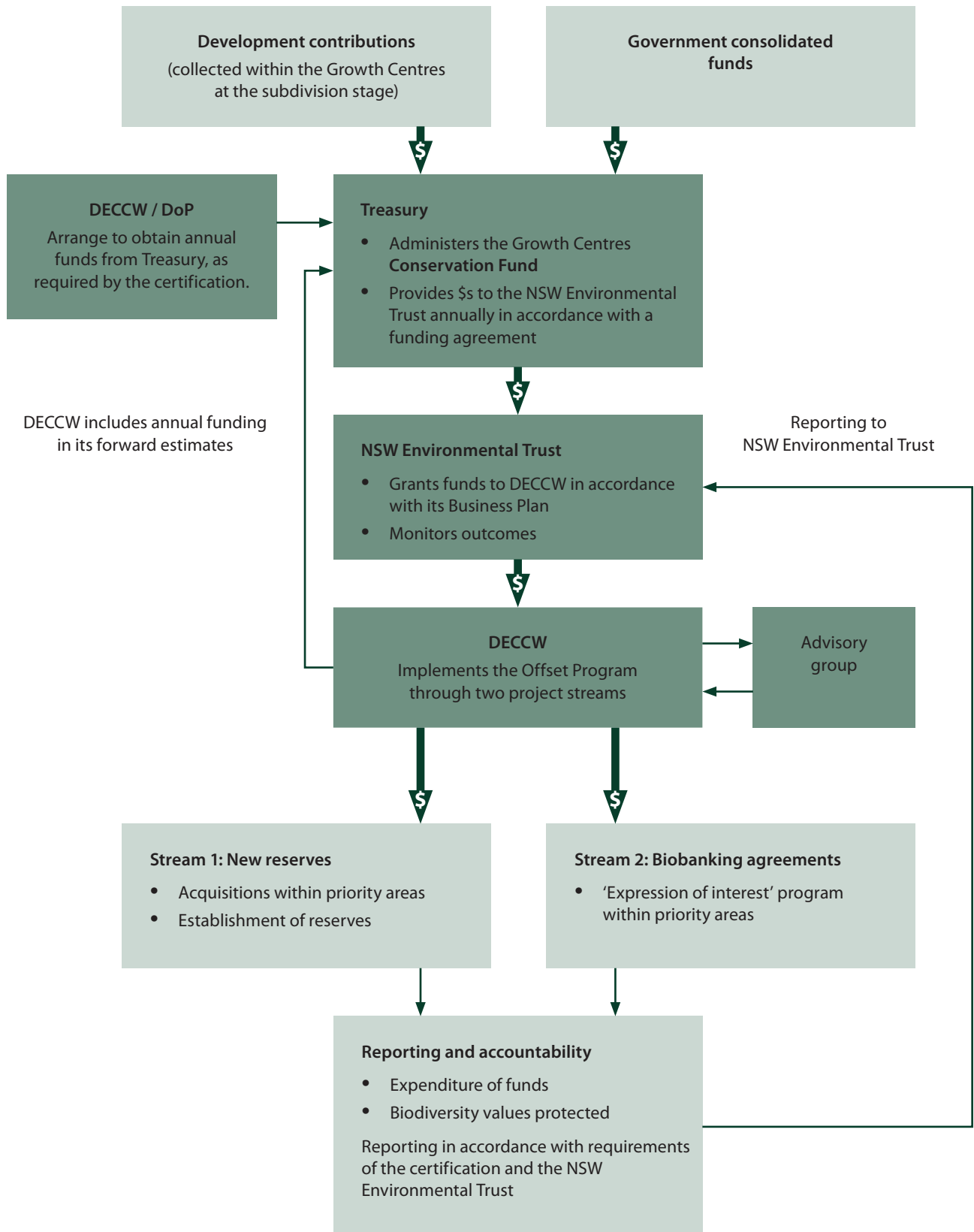
The purpose of this Annual Report is to report to the public on the amount of vegetation cleared within the Growth Centres, funding provided, amounts expended, conservation outcomes and predicted funding for the next ten years. This report is provided in accordance with Measure 31 of the biodiversity certification.

The order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 is available at www.environment.nsw.gov.au/resources/nature/biocertordwsgcentres.pdf



Cumberland Plain Woodland: Shale Hills, DECCW

Figure 1: Administration of funds and Program structure



1.2 Program goals and outcomes

Program goals

The primary goals of the Growth Centres Biodiversity 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.

Achieving these goals satisfies one of the requirements for the biodiversity certification of the Growth Centres SEPP (see Measure 23). The Program helps to ensure that development plans for the Growth Centres achieve an overall improvement or maintenance of biodiversity values. This will enable the certification of the Growth Centres SEPP to continue in operation, thus providing certainty for both future development and conservation outcomes.

Environmental goal

The Program's environmental goal is to contribute to the protection and long-term management of high conservation value native vegetation within the Cumberland Plain and surrounding regions.

The Cumberland Plain has been extensively cleared and its native vegetation is now highly fragmented throughout the landscape. The long-term viability of the remaining vegetation is threatened by further clearing, as well as degradation from weed invasion, altered fire regimes and illegal activities such as rubbish dumping. There is a growing number of species, populations and ecological communities in the region that are listed as threatened under NSW and Commonwealth legislation. The Program aims to conserve the areas of highest biodiversity value in this region by establishing new public reserves and biobanking agreements.

Criteria for protecting biodiversity values

The Growth Centres biodiversity certification sets out the following criteria for selecting sites within the Program's focus areas:

- 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 those 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 the development of the Growth Centres
- areas that can be cost effectively managed for biodiversity conservation
- conservation reserve design principles, such as size, boundary configuration and landscape context
- consideration of previous land uses
- assessment of 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.

Industry-related goals

The Program's industry-related goals are to:

- streamline and simplify the development approval process by 'switching off' the need for further threatened species assessment, and
- reduce the time and financial costs associated with land development, with flow-on benefits to housing supply and affordability.

Community-related goals

The Program's community-related goals are to provide the community with housing, jobs and infrastructure while also incorporating biodiversity conservation into the future landscape of Western Sydney.

Government priorities

This Program is both a NSW State Plan priority and a mandatory priority, given there is a statutory requirement for the biodiversity certification to be funded in order for it to remain in force. The certification supports NSW Government commitments relating to:

- better outcomes for biodiversity
- quicker and simpler development approval processes
- lower costs and faster approval processes for State infrastructure providers.

The Program contributes to delivering the NSW Government priorities set out in Table 1, below.

Program outcomes

The Program will achieve the following outcomes:

- 1 Funds will be allocated as expeditiously as possible within each financial year for purchasing reserves and establishing conservation agreements (Measure 26 of the certification).
- 2 Funds will be spent within the locations and in accordance with the criteria specified in Measures 32 and 33 of the certification.
- 3 Reporting will be undertaken at the end of each financial year on the following:
 - an estimate of the amount of 'existing native vegetation'¹, specified by vegetation type, that has been cleared within the Growth Centres.
 - the amount of funding provided from the Conservation Fund in the financial year for purchasing and establishing conservation agreements over lands outside the Growth Centres
 - the amount expended in the financial year, including the amount spent on land purchase, conservation agreements, administration and initial management costs for purchased land
 - a summary of the conservation outcomes achieved by that expenditure, and
 - the predicted funding for the Program for the next ten years (Measure 31 of the certification).

¹ Term defined in Section 3.2 of this report.

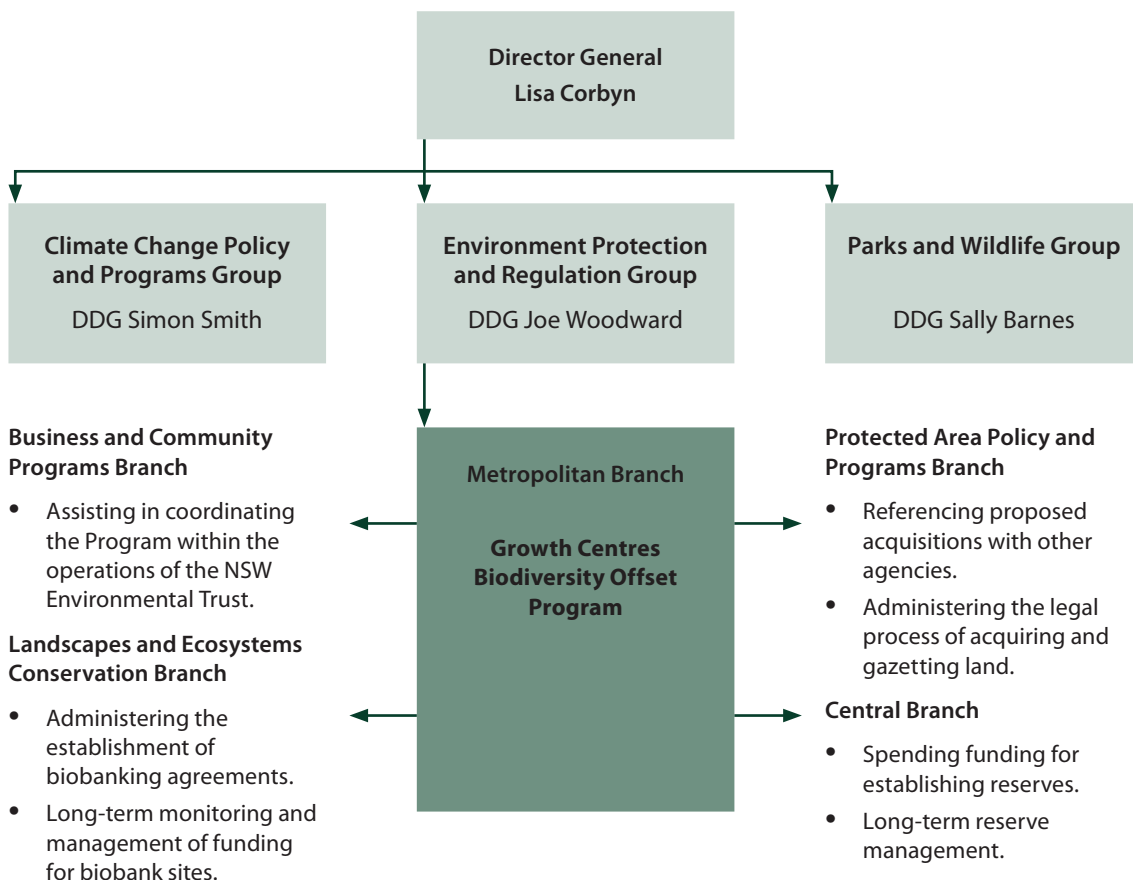
Table 1: NSW Government priorities relevant to the Program

State priorities
<p>State Plan: A new Direction for NSW (2006)</p> <p>Priority P3: Cutting red tape. Biodiversity certification of the Growth Centres SEPP supports the Government's commitment to provide better targeted regulation that reduces inefficiencies and unnecessary costs. The certification improves existing regulatory practice by ensuring that threatened species issues are resolved at the strategic planning stage, thus avoiding costs and delays at the development application stage.</p> <p>Priority E6: Housing affordability. The biodiversity certification supports the provision of housing supply by making the development approval process more streamlined and efficient. It demonstrates the Government's commitment to innovation in order to provide more affordable housing.</p> <p>Priority E4: Better outcomes for native vegetation, biodiversity, land, rivers and coastal waterways. The Program supports the Government's commitment to providing incentives to landholders for improved land management through stewardship programs and native vegetation offsets. The goal of these actions is to deliver the state-wide and regional biodiversity targets referred to in the State Plan.</p> <p>A new Biodiversity Strategy for NSW: Discussion Paper (2008) DECCW has released a discussion paper for a revised NSW Biodiversity Strategy. The draft Strategy is expected to be released for public exhibition in 2010.</p> <p>NSW National Parks Establishment Plan 2008 This Plan identifies the Cumberland Plain as a state-wide priority area for new core reserve areas. The Program may also contribute to reservations in other priority areas, such as the western part of the Sydney Basin bioregion.</p>
Regional priorities
<p>City of Cities – A Plan for Sydney's Future (Metropolitan Strategy, 2005)</p> <p>Objective E2: Protect Sydney's unique diversity of plants and animals. The Program is a major initiative in relation to Action E2.2.3 which refers to the development of new delivery tools such as regional funding, incentive schemes, offsets and adjustment mechanisms to enable ongoing management of areas of regional conservation significance on public and private lands.</p>

1.3 Program partners

Partners within DECCW that assist in delivering the Program are outlined in Figure 2, below.

Figure 2: Program partners within DECCW



Partners outside DECCW that are important to the Program's success, and their contributing activities, are:

NSW Department of Planning

- Liaising with NSW Treasury to ensure that annual funding to the NSW Environmental Trust is achieved (Measure 22a of the certification).
- If requested by DECCW, endeavoring to obtain additional funding contributions to accelerate land acquisition or conservation agreements over land outside the Growth Centres (Measure 22f of the certification).
- Providing DECCW with an annual update of the indicative ten-year funding timetable.
- Providing annual estimates of the amount of existing native vegetation that has been cleared within the Growth Centres (Measure 30).
- Through a partnership arrangement with the DoP Office of Strategic Lands, assisting DECCW to establish biobanking agreements on private lands.

Hawkesbury–Nepean Catchment Management Authority

- Implementing other biodiversity incentive schemes within the prioritised areas; this provides opportunities for collaboration.

Local councils

- Implementing land use planning and local conservation strategies that may have implications for the prioritised areas. This also provides opportunities for collaboration.

1.4 Links to other programs and priorities

The Program will be implemented in conjunction with other NSW Government and Australian Government projects that will protect biodiversity values in Western Sydney and the broader Sydney Basin. These programs are detailed below.

Cumberland Plain Recovery Plan

DECCW is currently preparing a recovery plan under the TSC Act for 20 threatened species, populations and ecological communities which are primarily endemic to Western Sydney. The Plan will coordinate actions to protect and manage the region's threatened biodiversity, with a strong focus on areas identified as priorities. The Plan will primarily be implemented through targeted incentive and offset programs (including this Program), as well as cooperative management arrangements for public land. Recovery plans for other species may also be relevant to this Program.

'Land Alive' program

DECCW is currently operating a program to encourage Aboriginal landowners to participate in the BioBanking Scheme. 'Land Alive' assists participating landowners to undertake site assessments, to be trained in land management and to market biodiversity credits created under the BioBanking Scheme. DECCW is funded with \$5 million from the NSW Environmental Trust to implement this program until June 2011. The opportunity exists for the Growth Centres Program to purchase biodiversity credits from Aboriginal landowners who participate in 'Land Alive'.

Great Eastern Ranges Initiative

The NSW Environmental Trust is providing DECCW with \$7 million over three years (2007–2010) to promote connectivity conservation with partners along the NSW Eastern Ranges. The Growth Centres Program can support this initiative by funding new reserves or biobanking agreements in the priority lands of the broader Hawkesbury–Nepean catchment area.

Caring for our Country

Under the National Reserve System element of Caring for our Country, the Australian Government provides up to two-thirds of the purchase price for a property which meets its criteria and which is to be managed for conservation. The Australian Government has committed \$180 million over the next five years to build the National Reserve System. The opportunity exists for the Growth Centres Program to supplement the acquisition of reserves with funding from Caring for our Country.

Other protection mechanisms for private land

Landowners may currently enter into conservation agreements under s69B of the *National Parks and Wildlife Act 1974* (NP&W Act) and s30 of the *Nature Conservation Trust Act 2001*. These agreements are seldom used in Western Sydney due to land prices and lost development opportunities. Biobanking agreements (under s127D of the TSC Act) commenced operation in 2008 and may be used by landowners in Western Sydney to secure offsets independently of

the Growth Centres Program. Property Vegetation Plans (PVPs) under Part 4 of the *Native Vegetation Act 2003* are excluded from most of Western Sydney¹, however they can be used to protect vegetation on private land in the broader Sydney Basin.

Planning and development outcomes

Land-use planning and development decisions in Western Sydney sometimes involve land transfers or offset funding to conserve biodiversity values. Examples of this include concurrences issued under s79B of the *Environmental Planning and Assessment Act 1979* (EPA&A Act) and planning agreements under s93F of that Act (e.g. the Australian Defence Industries Ltd site at St Marys). More broadly, conservation outcomes are also derived through rezoning under Part 3 of the EP&A Act or through approvals for proposals under Parts 3A, 4 and 5 of the Act.



Cumberland Plain Woodland, DECCW

¹ With the exception of Wollondilly LGA (see Schedule 1 of the *Native Vegetation Act 2003*).

2. Where and how the Program works

The following section describes the Program's areas of operation, the method used to identify and prioritise areas for potential investment of Program funds, and the implementation mechanisms.

2.1 Areas of operation

The focus areas for the Program are specified in the biodiversity certification. These areas are shown in **Map 1**.

The certification requires that, as a first preference, Program funds be invested in the priority areas within the Cumberland Plain identified in the 2006 Hawkesbury–Nepean Catchment Action Plan (HNCAP). These areas were identified by DECCW as lands that could most effectively be managed to provide for threatened biodiversity (**Map 2**). 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 for development. DECCW considers these lands, which cover approximately 26,000 hectares, to be the highest priority for future recovery efforts for the threatened biodiversity of the Cumberland Plain.

Criteria for guiding the spending of funds are included in the certification and include a consideration of reserve design principles, conservation values and cost effectiveness. Preference will be given to protecting the largest remnants of intact vegetation with the greatest potential for the long-term retention of biodiversity values.

If no suitable, cost effective lands are available in the areas of first preference, then priority areas within the broader Hawkesbury–Nepean catchment will be considered as a second preference. These areas were identified as part of the development of the HNCAP and comprise a network of regional corridors and fauna habitats in the catchment (**Map 3**).

Finally, as third and fourth preferences, funding can be spent to conserve grassy woodlands anywhere in the Hawkesbury–Nepean catchment and then the Sydney Basin, respectively. Grassy woodlands are a broad group of vegetation types, including Cumberland Plain Woodland, that are under-represented in the State's reserve system.

In summary, funding will be allocated according to the following preferences (in descending order):

- 1 priority areas within the Cumberland Plain, as identified in the HNCAP, then
- 2 priority areas within the Hawkesbury–Nepean catchment, as identified in the HNCAP, then
- 3 grassy woodlands within the Hawkesbury–Nepean catchment, then
- 4 grassy woodlands within the Sydney Basin.

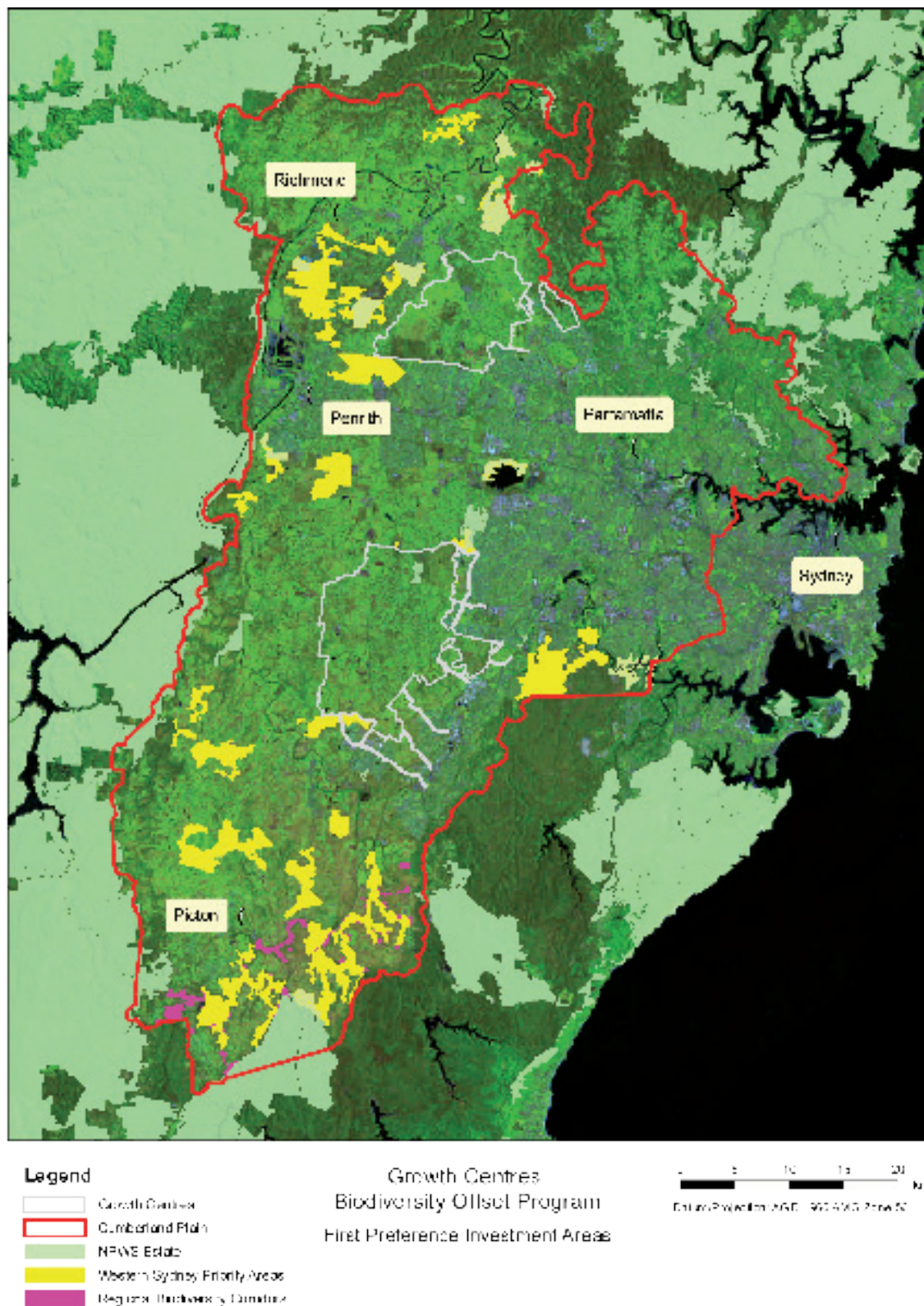
Pimelea spicata (endangered), DECCW



Map 1: Areas of Program operation

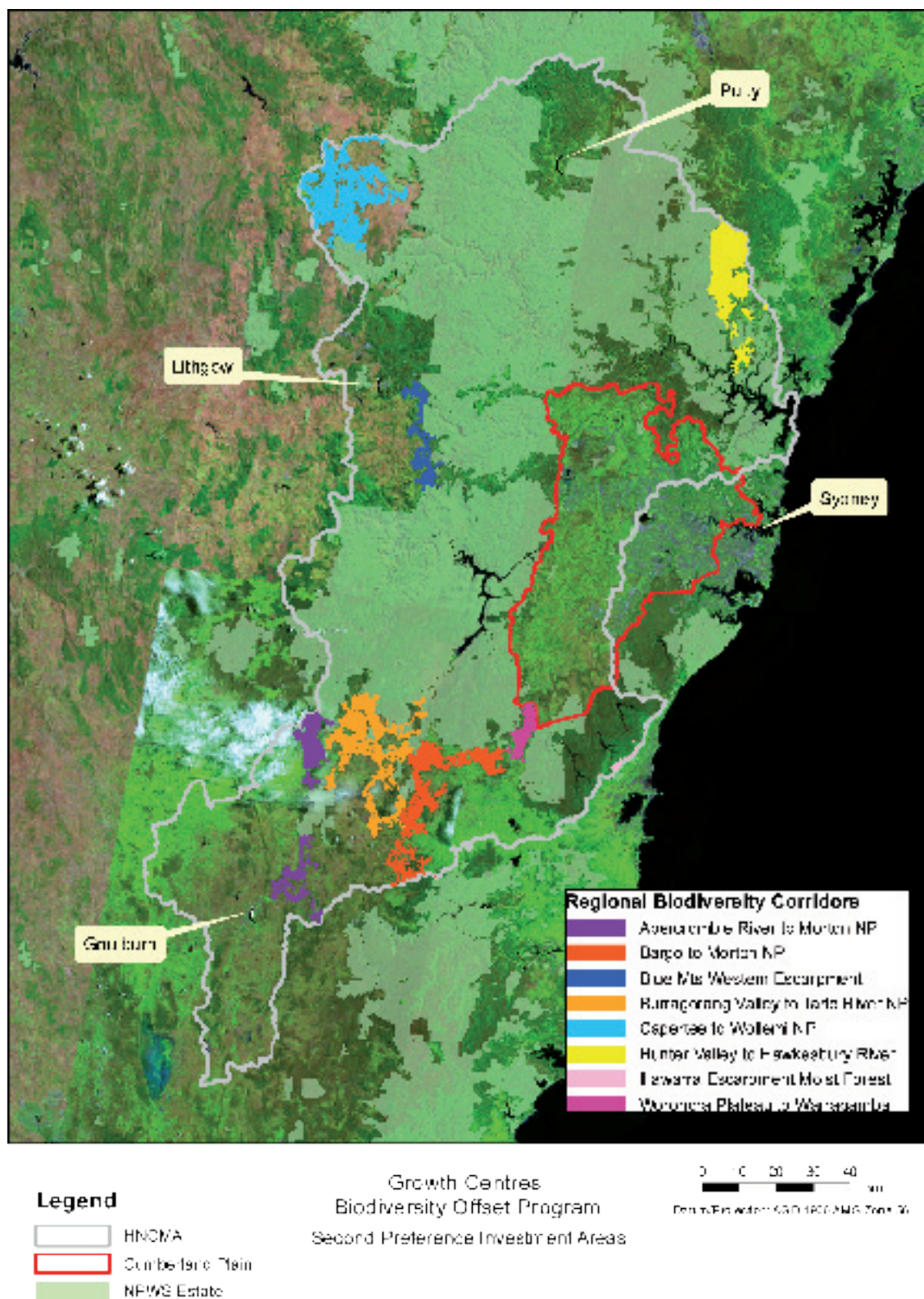


Map 2: Priority investment areas within the Cumberland Plain



Note: The first preference investment areas are the Western Sydney Priority Areas and the Regional Biodiversity Corridors. These areas are consistent with the Western Sydney Priority Areas and the Regional Biodiversity Corridors identified in the Hawkesbury–Nepean Catchment Action Plan 2007–2016, Map 9, Page 66.

Map 3: Priority investment areas within the remainder of the Hawkesbury–Nepean Catchment



Note: The second preference investment areas – the Regional Biodiversity Corridors shown above – are consistent with those identified in the Hawkesbury–Nepean Catchment Action Plan 2007–2016; Map 9, Page 66.

2.2 Targeted lands within the Cumberland Plain

DECCW has undertaken a detailed assessment of the priority areas within the Cumberland Plain in order to target properties for potential investment through the Program (refer to **Figure 3**).

This involved identifying the **Areas of Interest to the Program** as a subset of the Priority Areas indicated in Map 2. These Areas of Interest are based on cadastral boundaries and do not include:

- the NPWS estate
- areas within the Growth Centres (this area is excluded from investment)
- areas identified as unsuitable for investment during a recent review (DECC 2008a)¹.

Some lots within the Areas of Interest were not targeted for expenditure because they are either unsuitable or lower priorities for Program funding. These include areas that are:

- public reserved lands, such as council reserves, because they are already managed for conservation purposes
- public non-reserved lands including surplus and operational government land, such as universities, correctional facilities, crown land etc.
- private conservation lands – these include privately owned lands that are subject to protection and ongoing conservation management through mechanisms such as planning agreements and conservation covenants, and
- private lands with small areas of native vegetation; while these lands may be part of a larger vegetated remnant, individual privately owned lots within the larger remnant do not ‘stand alone’ as a suitable conservation area.

While not actively targeted for expenditure, funding requests associated with these lands may still be considered on a case-by-case basis in accordance with the criteria specified in the certification.

After removing the non-targeted lands, the remaining properties were classified as being potentially suitable for either reservation or biobanking agreements.

Lands potentially suitable for reservation were identified using the three stages of reserve establishment identified in the NSW National Parks Establishment Plan (DECC 2008b).

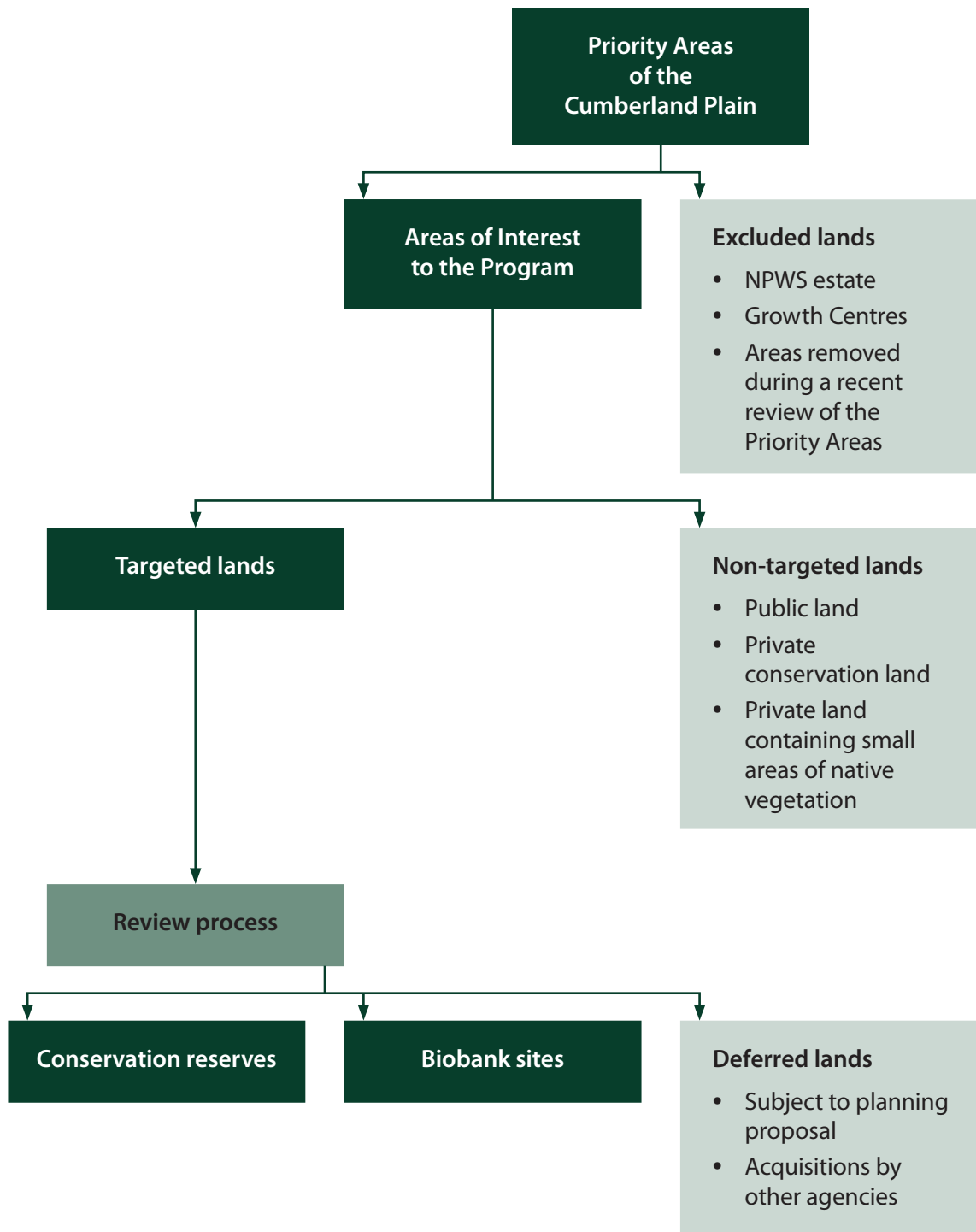
Land potentially suitable for biobanking agreements was identified as land that did not meet the reserve establishment criteria. The properties that were identified for potential reservation would also be suitable for biobanking as a second preference.

Not all of the targeted lands are available at any one time for Program investment. Properties have been deferred from current consideration if they are subject to a planning proposal or are being considered for acquisition by another agency.

About 20% of the targeted lands have been deferred from current consideration for these reasons. These properties will be reviewed annually to determine whether they have become available for consideration.

¹ This review refined the boundaries of the Western Sydney Priority Areas to exclude areas where remote imagery indicated that conservation values had been significantly diminished through disturbance. It also excluded areas identified for development in recent land-use planning decisions.

Figure 3: Framework for targeting properties for potential investment



2.3 Implementation mechanisms

The Program's funding is proposed to be spent using the following implementation mechanisms.

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. However, State conservation areas may be established in areas where there are underlying mineral resources. 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). Land will only be purchased from willing vendors.

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. Costs may include preparing and implementing an interim management plan for the acquired land, fencing, managing weeds, removing rubbish and formalising access.

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 TSC Act. Biobanking agreements 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 in exceptional circumstances.

Biobanking agreements through a partnership

DECCW will at times enter into a partnership with the DoP Office of Strategic Lands (OSL) in order to establish biobanking agreements on properties that are currently for sale but are not suitable for reservation.

OSL regularly buys and sells land in Western Sydney. It is responsible for acquiring land under the Sydney Region Development Fund, the Coastal Lands Protection Scheme as well as acquiring land for infrastructure projects like road and rail corridors.

If DECCW finds a high conservation value property which is currently on the market and is not suitable for reservation, it will approach OSL and fund it to purchase the land. A biobanking agreement will be established on the property, which will then be sold at a later date to a third party.

3. What we have achieved

The following section describes the Program's achievements for 2008–09, including measuring its outcomes against the performance criteria specified in the Growth Centres biodiversity certification. This section also includes a profile of the first property to be purchased with the Program funds.

3.1 Overview of 2008–09

2008–09 was the first year of operation of the Growth Centres Biodiversity Offset Program. During this establishment year considerable progress was made in developing the Program's policy and implementation framework. The year ended with a most significant conservation outcome – the purchase of a 181-hectare property at Cranebrook (see 'Conservation outcomes', below).

Key milestones achieved during this first year include:

- gaining the NSW Environmental Trust's endorsement of the Program's first Business Plan (2008–09 to 2011–12) in March 2008
- recruiting of a team of three staff to administer the Program
- initiating a funding agreement between DECCW, NSW Treasury and DoP; the agreement establishes the method for calculating future allocations to the Program
- establishing the Program's Advisory Group, with meetings held in February and June 2009
- establishing relationships with internal and external stakeholders
- analysing properties within the Cumberland Plain to identify those which may be suitable for acquisition or biobanking agreements
- compiling a portfolio of properties that will be ready for acquisition or biobanking agreements early in 2009–10
- developing a communication strategy for approaching landowners to ascertain their interest in selling or establishing biobanking agreements
- developing a partnership with the DoP Office of Strategic Lands so that biobanking agreements may be established on properties that are currently for sale but which are not suitable for reservation
- developing a reporting framework for the Program, including the methods DoP will use to report on the amount of vegetation clearing within the Growth Centres.

Eucalyptus tereticornis, one of the main Eucalypt species in Cumberland Plain Woodland, DECCW

3.2 Reporting on outcomes for 2008–09

Table 2 sets out the performance criteria which will be used to determine the Program's success. These criteria have been derived from the annual reporting requirements set out in the biodiversity certification (Measure 31).

Table 2: Performance criteria for the Program

Reporting requirement	Performance criteria	Outcome/ Section of this report
Amount of 'existing native vegetation' ¹ cleared within the Growth Centres	Area of each vegetation community type cleared within the Growth Centres	3.3
Amount of funding provided for the Program	Amount of funding obtained for the Program (reported in both current and equivalent 2005–06 dollar values)	4.2
	Is the level of funding obtained equivalent to the amount required to be provided to the Program by Measure 22(b) of the certification?	Yes
Amount of funding expended through the Program	Amount of funding spent on land purchase, conservation agreements, reserve establishment and administration	4.3
	Is the amount spent on administration within the limits set by Measure 24 of the certification?	Yes
Conservation outcomes achieved by the expenditure	For land purchases: <ul style="list-style-type: none"> • area of land reserved within each reserve category • area of land reserved within each category of preferred location specified in Measure 32 of the certification • area of each vegetation community type reserved. 	3.4
	For conservation agreements: <ul style="list-style-type: none"> • area of land protected under each type of agreement • area of land subject to agreements within each category of preferred location specified in Measure 32 of the certification • area of each vegetation community type protected • amount of funding deposited in the BioBanking Trust Fund for long-term management. 	N/A
	For reserve establishment costs: <ul style="list-style-type: none"> • types of management that have been undertaken in each new reserve (e.g. fencing, weed control, plan of management) • amount of funding spent on each type of management. 	N/A

¹ The term 'existing native vegetation' means areas of indigenous trees (including any sapling) that:
 a) had 10% or greater over-storey canopy cover present, b) were equal to or greater than 0.5 hectares in area, and c) were identified as 'vegetation' on Maps 4 and 5 of the draft Growth Centres Conservation Plan (GCC, 2007).

The following sections provide a summary of the Program outcomes for 2008–09 measured against the performance criteria.

3.3 Vegetation clearing within the Growth Centres

One of the requirements of the biodiversity certification is for DoP to report annually on the amount of vegetation clearing that has occurred within the Growth Centres (Measure 30). DoP has provided this information and has identified that 35.7 hectares of 'existing native vegetation' has been cleared since the time of certification (refer to Table 3). The extent of clearing of each vegetation community type is identified in Appendix 2.

Table 3: Vegetation clearing within the Growth Centres

Location	Amount of 'existing native vegetation' (hectares)			
	2003 ¹	2007 ²	2009 ³	Amount cleared between 2007 (the time of certification) and 2009
Protected Lands ⁴	1,999	1,985.2	1,981.5	3.7
Developable Lands ⁵	1,874	1,768.7	1,736.7	32.0
Total	3,873	3,753.9	3,718.2	35.7

The biodiversity certification requires a minimum of 2,000 hectares of 'existing native vegetation' to be retained and protected within the Growth Centres (see Maps 4 and 5). The certification anticipated that this vegetation would be retained within the protected lands where the Growth Centres SEPP applies development controls for vegetation clearing and that all existing native vegetation within the developable lands would be lost during the development of the Growth Centres. However, if it is determined during the detailed precinct planning that clearing needs to occur within the protected areas, the 2,000 hectare target may be achieved by protecting additional vegetation within the developable lands or by undertaking revegetation.

Table 3 above indicates that, of the 1,999 hectares of existing native vegetation that was present within the protected lands in 2003, 1,981.5 hectares remained present in June 2009. Since 2007 (approximating the time of certification) and June 2009, 3.7 hectares of this vegetation had been cleared. However, the planning for two precincts (North Kellyville and Riverstone West) has been gazetted since the time of certification. The planning for these precincts has resulted in the protection of a total of 5 additional hectares of existing native vegetation within developable areas, leading to an overall gain in the amount of existing native vegetation protected within the Growth Centres since the time of certification.

32 hectares of 'existing native vegetation' has been cleared within the developable lands since the time of certification, primarily within the gazetted precincts of Oran Park, Turner Road and North Kellyville. However, as noted above, the certification envisaged the loss of all of the existing native vegetation with the developable areas during the development of the Growth Centres.

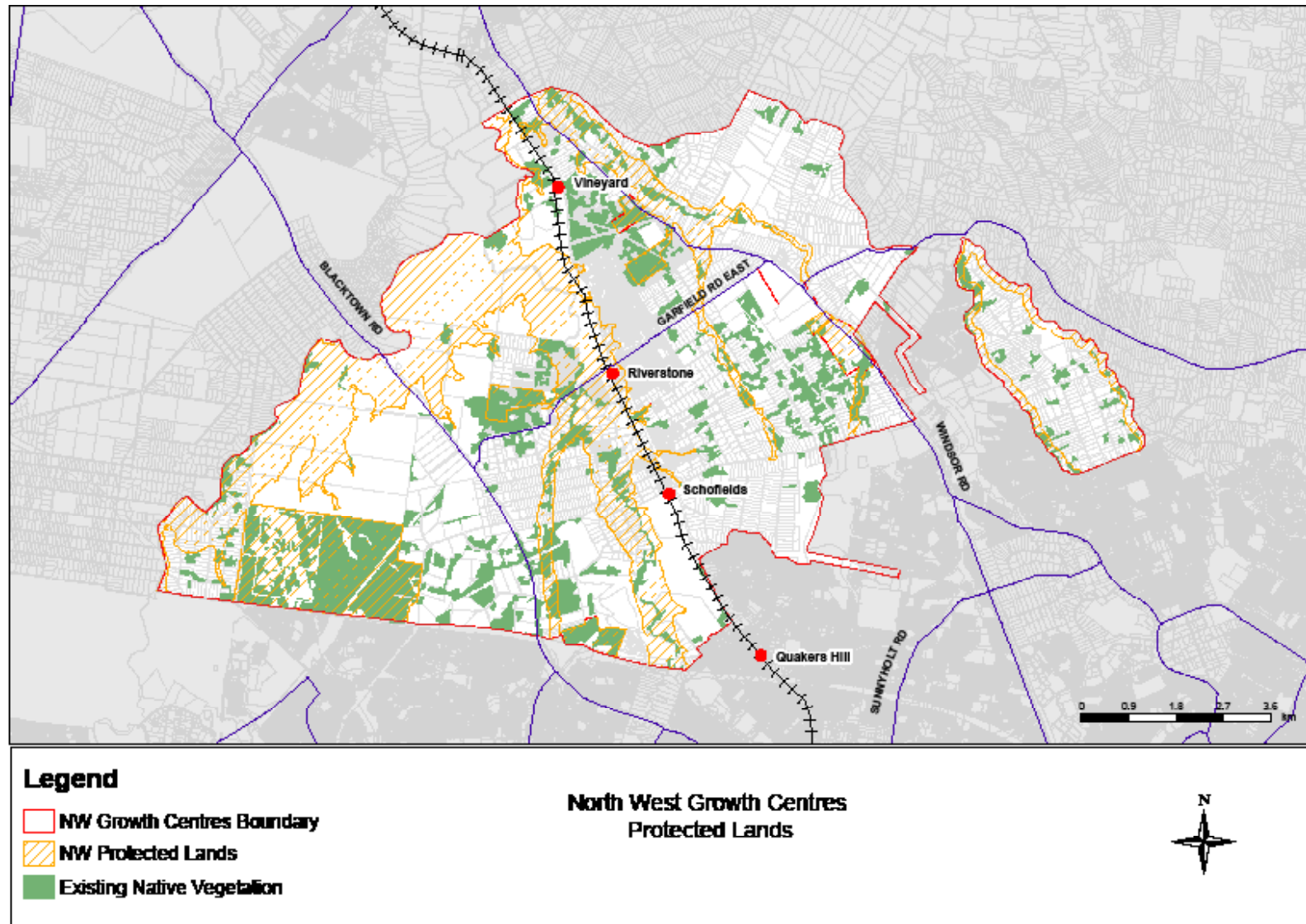
1 Amount of existing native vegetation identified in 2003 and reported in the Growth Centres Conservation Plan (Growth Centres Commission, 2007).

2 Amount of existing native vegetation identified during 2007, approximating the time of certification.

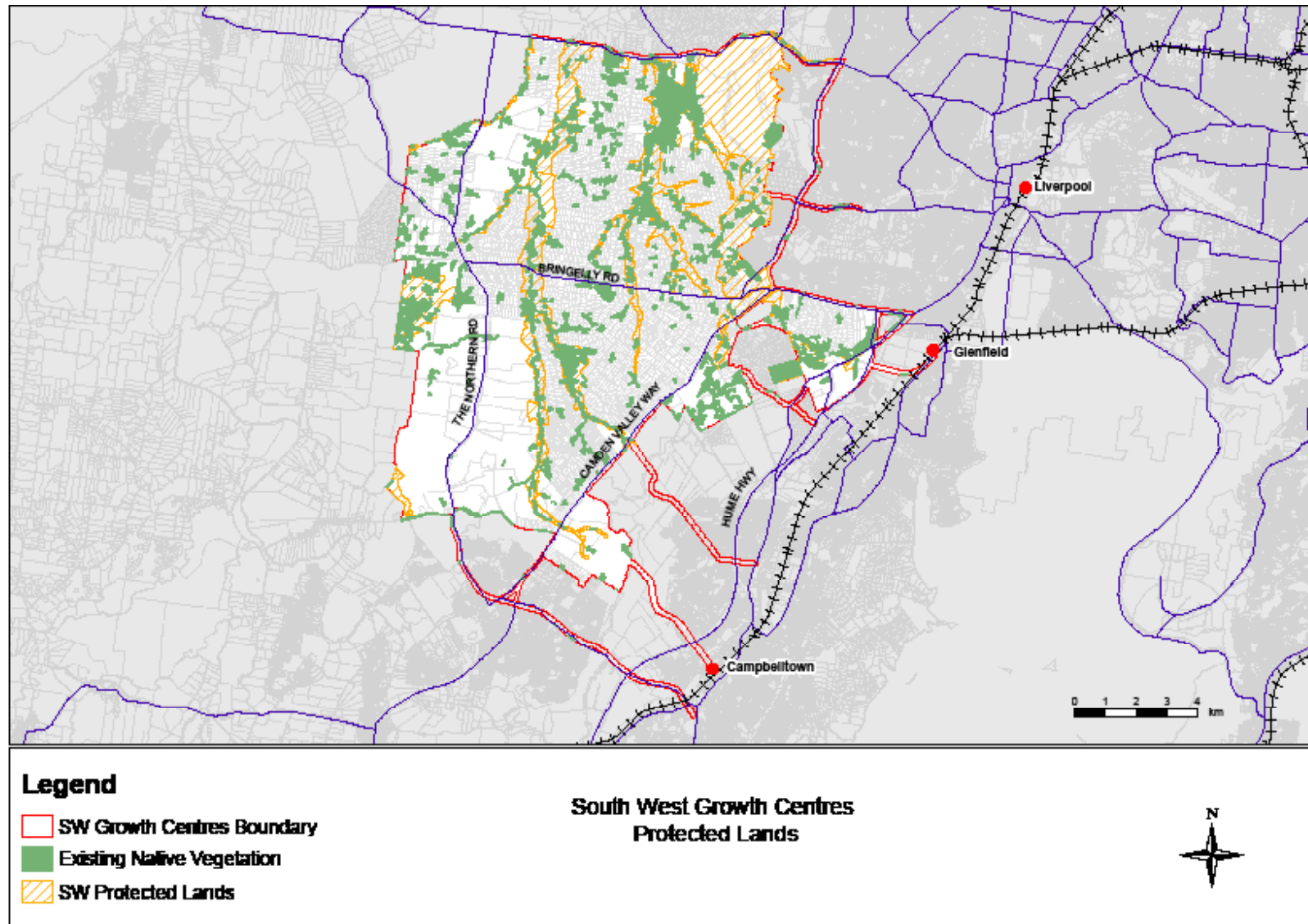
3 Amount of existing native vegetation identified in March / April 2009 using remote sensing analysis.

4 The term 'Protected Lands' refers to the hatched lands in Maps 4 and 5.

5 The term 'Developable Lands' refers to the un-hatched lands in Maps 4 and 5.



Map 4: North West Growth Centres Protected Lands



3.4 Conservation outcomes for 2008–09

The most significant conservation outcome for 2008–09 was a commitment to provide funding from the Program to purchase a 181-hectare property at Cranebrook, near Penrith. The property contains some of the best remaining areas of Cumberland Plain vegetation in western Sydney, including significant populations of rare and threatened plants.

Opportunities to acquire and reserve vegetation remnants on the Cumberland Plain of a similar size and condition to this one are extremely limited. While some of the site is currently degraded, it is expected to recover over time with proper management. The purchase of the Cranebrook property is the first acquisition for the Program. It demonstrates how lots of small losses of biodiversity within the Growth Centres can be turned around and can contribute to a substantial gain (see the following property profile for more information). The outcomes for Cranebrook are set out in Table 4 below. Appendix 3 provides additional information about the assessment of the Cranebrook property.

Table 4: Conservation outcomes achieved by the purchase of the Cranebrook property

Growth Centers biodiversity certification criteria		Conservation outcome
Total area of land reserved		181 hectares
Reservation category under the NP&W Act		To be determined
Is the land within a preferred location for the expenditure of Program funds, as specified in Measure 32 of the certification?		Land is within the area of first preference.
Vegetation communities to be reserved	Cooks River/Castlereagh Ironbark Forest endangered ecological community (EEC)	41.2 hectares
	Castlereagh Scribbly Gum Woodland	66.1 hectares
	Shale Gravel Transition Forest (EEC)	3.5 hectares
	Castlereagh Swamp Woodland (EEC)	50.3 hectares
	Cleared land to be re-vegetated	20.0 hectares



Regenerating bushland, DECCW



Castlereagh Scribbly Gum Woodland, DECCW



Castlereagh Swamp Woodland, DECCW



Castlereagh Ironbark Forest, DECCW

The photos on pages 22 and 23 show vegetation at Cranebrook that is now permanently protected through the assistance of the Program.

The Program's first purchase: a new reserve at Cranebrook in Western Sydney



Above: Riparian habitats are well represented at the site and are associated with Rickabys Creek and its floodplain. Such habitats are becoming increasingly rare.

Below: The new reserve provides fragmented connectivity to other reserves in the region.

Below right: One of the seven threatened flora species found at the site, *Dillwynia tenuifolia*. Its conservation status is vulnerable.



The Department of Environment, Climate Change and Water NSW (DECCW) has purchased a significant new public reserve at Cranebrook in Western Sydney.

The 181-hectare property is of high conservation value. It contains the upper catchment area of Rickabys Creek and a mosaic of vegetation types associated with ancient alluvial deposits.

The land supports a diverse range of native flora and fauna species, and a diversity of habitats for these species.

Three of the four vegetation types at Cranebrook are listed as endangered under the NSW *Threatened Species Conservation Act 1995*.

The property also contains populations of seven species of threatened flora. The populations of three of the threatened plants are among the largest recorded for these species.

Two threatened fauna species, the eastern freetail-bat and Cumberland land snail have also been recorded at the site.

The property 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.

Protecting corridors and associated refuge areas is critical for the long-term integrity and viability of remnants and flora and fauna in these areas.





Native Kangaroo grasslands at Cranebrook, DECCW

Opportunities to acquire and reserve vegetation remnants on the Cumberland Plain of a similar size and condition to this one are extremely limited. While some of the site is currently degraded, it is expected to recover over time with proper management.

Financial summary	
Australian Government funds	\$11.70 m
Growth Centres Offset Program	\$2.84 m
Other funding sources	\$2.96 m
Total cost of purchase	\$17.5 m

The property has been purchased for \$17.5 million, with two-thirds of this amount coming from an Australian Government Caring for our Country grant. The grant honors a pre-election commitment by the Australian Government to spend up to \$15 million to create a new conservation corridor for Western Sydney.

A significant component of the remaining funding comes from the NSW Government's Growth Centres Biodiversity Offset Program. The Program will also fund the management of the site for an initial five-year period. Following this establishment phase, management funds will come from DECCW's annual park management allocation.

The purchase of the Cranebrook property is the first acquisition for the Program. It demonstrates how lots of small losses of biodiversity within the Growth Centres can be turned around and can contribute to a substantial gain.

The Cranebrook property will become a new reserve under the *NSW National Parks and Wildlife Act 1974*.

It will provide the people of western Sydney with a breathing space where they can enjoy some of the region's unique plants and animals.



The vulnerable species eastern freetail-bat.

4. Financial report

The following section provides information about the Program's funding arrangements, including the projected funding amounts for the next ten years. Details about the Program's income and expenditure are also provided.

4.1 Program funding

Of the \$530-million Conservation Fund established as a condition of the certification of the Growth Centres SEPP, \$397.5 million has been allocated for expenditure outside the Growth Centres. This component of the Conservation Fund provides the funding source for the Growth Centres Biodiversity Offset Program.

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 levels were therefore low (\$780,000) at the commencement of the Program in 2008, however are predicted to increase annually to a peak of about \$15 million per annum in 2022¹.

The funding is allocated to the Program in accordance with a ten-year payment timetable which is updated annually (refer to Measure 22 of the biodiversity certification). Table 5 sets out the likely funding allocations for the next ten years.

While funding levels will be updated annually and will vary from year to year, the total funding for the program remains at \$397.5 million when measured in 2005–06 dollar values (indexed in accordance with the certification). The full amount of this funding will be obtained in the year that the last lots are expected to be released within the Growth Centres. This is expected to be 2047.

¹ Funding projections are calculated annually based on the predicted lot yields within the Growth Centres and an index which accounts for changing land values. There is also a correction applied for any difference in predicted and actual lot yields in previous years.

Hardenbergia violacea, DECCW



Table 5: Projected funding for the next ten years of the Program

Financial year	Projected program funding 2005–06 \$ values (\$ million)	Projected program funding Current \$ values (\$ million)
2008–09	0.918	0.780
2009–10	1.410	1.198
2010–11	2.352	2.000
2011–12	3.726	3.167
2012–13	5.154	4.381
2013–14	6.105	5.189
2014–15	7.623	6.480
2015–16	8.772	7.456
2016–17	9.957	8.464
2017–18	10.236	8.700
2018–19	12.453	10.585
Total (for 2008–09 to 2018–19)	68.706	58.400



Endangered ecological community Shale Sandstone Transition Forest, DECCW

4.2 Funding allocation for 2008–09

\$780,000 was allocated to the Program for expenditure in 2008–09 (Table 6), amounting to \$918,000 in 2005–06 dollar values (refer to Table 5 above).

This funding is less than the \$1 million (2005–06 dollars) identified for the year in Schedule 4 of the biodiversity certification. The reduced funding reflects a significant downturn in the expected lot yield for the year from 425 lots to 150 lots and a 15% decrease in land values. Both of these factors are used to calculate annual funding levels.

The 150 lots estimated for 2008–09 represent 0.07% of the total remaining lot production in the Growth Centres. The \$918,000 (2005–06 dollar values) allocated for this year is 0.23% of the total remaining funds of \$397.5 million. This is greater than the 0.07% required by the certification (refer to Appendix 1). The reason for this is that DoP provided an additional allocation of \$520,000 in current dollar values to the Program. This was allocated early in the financial year when it became apparent that Government had under-allocated for the Program by providing only \$260,000 through budget processes. This initial under-allocation occurred while agencies were still finalising the funding arrangements for the Program.

In summary, the funding obtained for 2008–09 was more than the amount that is required by the certification when the method for determining annual funding levels is applied. The increased funding for 2008–09 has been factored into the Government's funding agreement for the Program and will result in slightly reduced allocations over the remainder of the Program. Total funding for the Program remains at \$397.5 million in 2005–06 dollar values.

Table 6: Program income for 2008–09

Income	(\$)
Budget allocation	260,000
Additional allocation from the NSW Department of Planning	520,000
Total allocation for 2008–09	780,000



Wetland habitat, Cumberland Plain, DECCW

4.3 Funding expenditure for 2008–09

Of the \$780,000 allocated for the year in current dollar values, \$580,000 has been held over by the Trust for expenditure in the coming year (refer to Table 7). The likelihood of this underspend was identified in the Business Plan for the year given that reserve acquisitions typically take up to 18 months to complete. The funding is available to the Program for a major acquisition in the coming year.

Of the remaining \$200,000, \$185,018 was allocated for administrative expenses (refer to 'Administration of the Program' below). \$7,000 was allocated as partial payment for a contractor to undertake an assessment of a potential biobank site that may receive funding in 2009–10. A residual amount of \$7,982 is being carried by DECCW for expenditure in 2009–10.

The purchase of the Cranebrook property has not required any expenditure of funds for 2008–09. The Program has committed to allocating \$2.84 million in instalments over a three-year period from 2010–11 to 2012–13 to pay for this purchase.

Administration of the Program

The administrative expenses of the Program are related to achieving the key milestones for the Program identified in Section 3.1. They comprise the salaries, on-costs and expenses of the project team, such as software and travel.

Administrative expenses are required to be maintained at less than 5% of the annual Program funding from 2012–13 onwards (refer to Measure 24 of the biodiversity certification). Until that time, funding for the administration of the program is as indicated in the year's Business Plan for the Program which has been endorsed by the NSW Environmental Trust.

Table 7: Program expenditure for 2008–09

Expenses	(\$)
Administrative expenses	
Salaries for 2.6 staff with on-costs	183,613
Other operational expenses	1,405
Expenditure for land acquisitions, reserve establishment and biobanking agreements.	
Biobanking assessment of a property for possible investment in 2009–10	7,000
Carried forward by DECCW for expenditure in 2009–10	7,982
Held by the NSW Environmental Trust for expenditure in 2009–10	580,000
Total	780,000

5. References

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Pultenaea parviflora (endangered), DECCW

Appendix 1

Calculation of Program funding allocation for 2008–09

Annual allocations to the Program are calculated based on:

- The proportion of total remaining lot production in the Growth Centres that is expected to occur within a given financial year. The certification ensures that the same proportion of the remaining, unallocated amount of the planned \$397.5 million funding is also allocated for that year (refer to Measure 22b of the Growth Centres biodiversity certification).
- A land index which converts 2005–2006 dollar values into current dollar values. The land index is calculated using methods described in the Growth Centres *Special Infrastructure Contribution Practice Note* (GCC 2008). The purpose of the index is to ensure that the conservation funding retains an equivalent ability to purchase land over the years of the Program's operation.
- A correction for any difference between the predicted and actual lot yields for the previously completed year.

Table 8 below provides the calculations for the Program's funding allocation for 2008–09.

Table 8: Calculation of Program funding for 2008–09

Total remaining lot production at start of 2008–09 (Note that this contains both residential and non-residential lot equivalents)	220,998 lots
Predicted lot production for 2008–09 (Note that this contains both residential and non-residential lot equivalents)	150 lots
Adjustment for difference between actual and predicted lot production from the previous completed year (2007–08)	0 lots
Predicted lot production for 2008–09 (adjusted for past actuals)	150 lots
Predicted lot production for 2008–09 (adjusted) as a % of remaining lots (i.e. 150 as a percentage of 220,998)	0.0679 %
Calculation of funds to be allocated	
Remaining unspent funds at start of 2008–09 (2005–06 \$ values)	\$397,500,000
Allocation for this year in 2005–06 \$ values (i.e. 0.0679% of \$397,500,000)	\$269,799
Land index value (converts 2005–06 \$ values to current \$ values)	-15.00%
Required allocation for 2008–09 in current \$ values (i.e. 85% of \$269,799)	\$229,329
Additional allocation or adjustment (current \$ values) (i.e. the difference between the total allocation of \$780,000 and the required allocation of \$229,329)	\$550,671
Additional allocation in 2005–06 \$ values	\$647,848
Total allocation in 2005–06 \$ values	\$917,647
Total allocation in current \$ values	\$780,000

Appendix 2

Vegetation clearing within the Growth Centres

2007–2009

Table 9: Extent of existing native vegetation cleared by community type between 2007 (the time of certification) and 2009

Amount of vegetation community cleared (hectares)			
Vegetation community	Protected Lands	Developable Lands	Total
Cumberland Plain Woodland	1.52	16.87	18.39
Shale Sandstone Transition Forest	0.00	0.05	0.05
Shale Gravel Transition Forest	0.00	0.54	0.54
River-flat Eucalypt Forest	2.14	14.50	16.64
Total	3.7	32.0	35.7

Appendix 3

Assessment of the Cranebrook property

The Growth Centres biodiversity certification identifies criteria which are to be used as a guide to identify lands to be targeted for purchase or conservation agreements outside the Growth Centres (refer to Measure 33). Table 8 below identifies how these criteria have been used to guide the purchase of Cranebrook.

Table 10: Assessment of the Cranebrook property against the biodiversity certification criteria

Certification criteria	Assessment of property	Consistent?
1 Large remnants of intact native vegetation with the greatest potential for retaining biodiversity values over time	The property has been assessed as having high management viability. It contains a very large area of native vegetation (161 hectares) with a good perimeter-to-area ratio and good connectivity in the landscape.	Yes
2 Vegetation communities that are under-represented in the protected area network	All vegetation types on the property are under-represented in the protected area network.	Yes
3 Areas of equivalent or better conservation value to that which are to be cleared within the Growth Centres	All vegetation types on the property are of medium or high conservation value. They are all of equivalent or greater conservation value to the vegetation types being cleared in the Growth Centres.	Yes
4 Areas that contain habitat for threatened species, including but not limited to species to be affected by the Growth Centres	Populations of five of the seven threatened flora species recorded from the property will be cleared in the Growth Centres. Habitat for both of the threatened fauna species recorded from the property will be cleared in the Growth Centres.	Yes
5 Conservation reserve design principles, such as size, boundary configuration and landscape context	The proposal is consistent with good reserve design principles in that the protected area is relatively large with a good perimeter-to-area ratio. The property has an important role in providing connectivity in this part of the Cumberland Plain.	Yes
6 Likely threats (such as existing or future adjoining land uses)	The threatening processes operating on the property include slashing, weed invasion, illegal access, frequent fire and rubbish dumping. If actively managed, these threats will not diminish the long-term viability of the biodiversity on the property.	Yes
7 Previous land uses	Most of the property has been cleared in the past and is now actively regenerating. Previous land uses are unlikely to have diminished the potential of the property to retain its biodiversity values over time.	Yes
8 Areas that have the highest cost effectiveness	The large and predominantly vegetated nature of the property makes this a cost effective proposal. The relatively good condition of the vegetation will assist in minimising future management costs.	Yes
9 Availability	The land was available for purchase from the landowner in 2009.	Yes

Notes:

1 Large remnants of intact vegetation. A remnant was considered to meet this criteria if it:

- contains good quality vegetation based on existing mapping [i.e. the A, B and C condition classes of NPWS (2002)] or a biobanking assessment (moderate to good condition classes)
- is greater than or equal to 4 hectares in size after the removal of a 50 metre disturbance buffer
- has at least 30% vegetation cover within both a 0.55-kilometre and 1.75-kilometre radius circle surrounding the remnant, and
- has a perimeter-to-area ratio less than that of a 100-metre wide polygon of equivalent area.

These criteria are consistent with those used to identify areas of 'high management viability' (HMV) as applied in the draft Growth Centres Conservation Plan (GCC 2007).

Where a remnant extends beyond the boundaries of the subject property, contiguous good quality native vegetation outside the property boundary is only included in the above calculations when it is part of a public reserve or zoned for environmental protection.

The definition of HMV applied by the Growth Centres Commission (2007) also requires that the subject vegetation be an endangered ecological community. For this Program, conservation status is addressed separately in Sections 2 and 3 below.

2 Under-represented vegetation communities

The adequacy of representation levels for vegetation communities was assessed with reference to the JANIS criteria (criteria for establishing reserves, Commonwealth of Australia 1997). For the purposes of this Program, a vegetation community will be considered to be under-represented if it:

- meets the JANIS definition of vulnerable¹ and less than 60% of its extant area occurs in the protected area network
- meets the JANIS definition of rare² or endangered³ and less than 100% of its extant area occurs in the protected area network, or
- does not meet the JANIS definition of vulnerable, rare or endangered and less than 15% of its pre-1750 distribution occurs in the protected area network.

3 Conservation value

The Growth Centres Conservation Plan (GCC 2007) provided a matrix to classify the conservation value of each vegetation community. The matrix considers priority for protection based on the percentage of community in formal reservation, the historical clearing rate, and total remaining area of the community. Vegetation communities must be of high or medium conservation value to be of equivalent or better conservation value than those which will be cleared in the Growth Centres.

4 Habitat for threatened species

Populations of threatened species were identified through previous studies and compared to the species listed as likely to be present in the Growth Centres, as indicated in Tables 2 and 3 of the Growth Centres Conservation Plan (GCC 2007).

1 A **vulnerable ecosystem** is one which is approaching a reduction in extent of 70% within a bioregional context and which remains subject to threatening processes, or not depleted but subject to continuing and significant threatening processes which may reduce its extent.

2 A **rare ecosystem** is one whose geographic distribution involves a total range of generally less than 10,000 hectares, a total area of generally less than 1,000 hectares or patch sizes of generally less than 100 hectares, where such patches do not aggregate to significant areas.

3 An **endangered ecosystem** is one where its distribution has contracted to less than 10% of its former range or the total area has contracted to less than 10% of its former area, or where 90% of its area is in small patches which are subject to threatening processes and unlikely to persist.

5 Conservation reserve design principles

The consistency of the proposed reserve with reserve design principles was assessed with specific reference to:

- overall remnant size, connectivity, shape and condition (for all properties)
- the extent to which the management boundaries of an existing reserve will be improved (for proposed reserve additions only), and
- whether the property is of a suitable size and shape for reservation (for proposed new reserves).

6 Likely threats

The threats to biodiversity on the property were described and assessed with reference to the feasibility and cost effectiveness of any proposed threat abatement measures. This includes consideration of the influence of existing and future adjoining land uses, as well as the impact of previous land uses (see section below).

7 Previous land uses

The impact of previous land uses on present management issues was assessed with reference to factors including:

- the extent to which degraded habitats can be restored to their pre-disturbance state, including consideration of soil condition and the state of the soil seed bank, and
- the likelihood of contaminated waste being present.

8 Cost effectiveness

Cost effectiveness of the purchase was assessed with reference to factors including:

- purchase price
- reserve establishment costs
- BioBanking costs, including those associated with the establishment of a biobanking agreement and the retirement of biodiversity credits, and
- anticipated resale value with a biobanking agreement in place.

9 Availability of the property

Availability was assessed based on the landowner's willingness to consider a sale of the property.

