

**Review of the
Conservation Values of
Commonwealth land in
Western Sydney**

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1. INTRODUCTION

The requirement for this review follows a decision by the Howard Government in 2001 in which it was decided that 828 hectares, including all of the endangered Cumberland Plain Woodland, on the former Australian Defence Industries Site in the western Sydney suburb of St Mary's was to be protected.

Around the time of this decision, the Environment Minister Senator the Hon Robert Hill noted in a media release that Cumberland Plain Woodland was once abundant in western Sydney but due to intense agricultural and urban development only eight per cent now remained. In a media release, Senator Hill stated that the Government would commission a review of all remaining Commonwealth open space in western Sydney to assess its conservation values. Senator Hill suggested that the purpose of the review was to ensure that future development of such land is compatible with good conservation practice.

2. METHODOLOGY

The Department of Environment & Heritage has conducted an assessment of Commonwealth properties in western Sydney using existing in-house data on tenure, vegetation mapping, species point location records and National Estate values.

In view of the commitment to review open space, only properties that were larger than 5 hectares were considered. A list of properties was derived from NSW Department of Information Technology and Management in the absence of a comprehensive Commonwealth list. This yielded 28 properties for analysis.

The former ADI site at St Marys was not included in the review analysis. The conservation values of the site have already been assessed under the *Environment Protection (Impact of Proposals) Act 1974* in relation to a proposal by ComLand (Commonwealth Government Business Enterprise) to develop the site. Consequently, a Regional Environmental Park will be implemented on the site to protect the identified conservation values from urban development.

Properties that were partly Commonwealth owned were included as well as those wholly owned. For example, Telstra properties are 50% owned. Some blocks may have more than one Commonwealth owner.

It should be noted that this analysis of Commonwealth land represents a snapshot in time as some sites, such as the CSIRO Prospect property, while currently in the possession of the Commonwealth, are well advanced in the process of disposal.

Western Sydney is defined as the boundaries adopted by the NSW National Parks and Wildlife Service for their vegetation mapping of the Cumberland Plain. The Cumberland Plain is broadly the area between Parramatta and the Hawkesbury-Nepean River, from Windsor in the north to Thirlmere in the south. It is defined by a broad, rolling plain of heavy clay soils surrounded on all sides by the rugged topography of Hawkesbury Sandstone. The clay soils are derived from Wianamatta Shales and produce distinctive woodland vegetation dominated by Grey Box quite unlike vegetation elsewhere in the Sydney Basin.

In the analysis the following data sources are used:

- the latest vegetation mapping from NSW National Parks and Wildlife Service;
- species point locality information from a range of sources;
- tenure information from NSW Department of Information Technology and Management; and
- the Register of the National Estate database.

Natural Values

The analysis concentrated on natural values (vegetation, flora and fauna) for which we have the most data. However, few, if any of these land holdings have been systematically surveyed and further investigations may reveal the presence of other species and higher conservation values.

We considered only the species and ecological communities that are listed under the *Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act). Commonwealth properties are likely to support other species and ecological communities listed as threatened under NSW legislation. However, as noted above our analysis was compared with the results of a scientific assessment of the conservation significance of native vegetation of the Cumberland Plain in western Sydney undertaken by the NSW National Parks and Wildlife Service (NPWS) that was published in October 2002.

Historic and Indigenous

Historic and Indigenous values have not been well documented in western Sydney. Sites, artefacts and built structures of high value are likely to be present on many properties, especially the larger ones. Over two thousand individual parcels of land have been identified as Commonwealth owned; based on the Committee of Review of Commonwealth Owned Heritage Places (the Schofield Report), about one third of these properties would have heritage value.

3. RESULTS

Between October 2001 and June 2002, the Department of Environment & Heritage undertook an initial analysis of the conservation value of 31 areas of Commonwealth open space across western Sydney. In view of the commitment to review Commonwealth open space, only properties that were larger than 5 hectares were considered. This analysis concentrated on natural values - flora and fauna.

The results of the analysis are presented in the following products.

Appendix A: Study Area and Existing Conservation Reserves

- This map depicts the boundaries of the study area, the Commonwealth properties, their names and boundaries and existing conservation reserves.
- In particular, it illustrates how little of the remnant vegetation of the Cumberland Plain is reserved for conservation.

Appendix B: Landsat Image of the Study Area

- This image provides a satellite photograph of the Sydney Basin with Commonwealth land boundaries outlined in yellow.

Appendix C: Important Large Remnants of Native Vegetation

- This map shows the relative importance of the Llandilo and Orchard Hills sites in terms of intact stands of remnant vegetation.
- The map also highlights high remnant values in the northern region of the Holsworthy estate.

Appendix D: Threatened Ecological Communities listed under the EPBC Act

- This map highlights the present distribution of Cumberland Plain Woodland and Shale/Sandstone Transition Forest, both classified as threatened ecological communities under the *Environment Protection & Biodiversity Conservation Act 1999*.
- Recently NSW botanists have identified about 1500ha of vegetation in northern Holsworthy as Cumberland Plain Woodland. This area has not been mapped and so cannot be shown here.
- The map shows the high values present at the Orchard Hills site.

The map at Appendix E is based on point location data aggregated to give an indication of the richness of vertebrate fauna. The data have been obtained from sources such as the NSW National Parks and Wildlife Service and the Australian Museum. However, as little survey work has been conducted on the Commonwealth estate it is not possible to draw firm conclusions at this stage. For example it is known that relatively few surveys have been carried out in the Orchard Hills site. Additional survey work may significantly modify what are regarded as the richest areas for species.

Appendix E: Areas of Richness for Vertebrate Fauna Species

- The northern and southern extremes of the Holsworthy property as well as the Richmond site are highlighted as areas of faunal richness.
- It is not possible to comment on the relative richness to be found at the properties south of the Richmond site in the absence of comprehensive survey data.

Appendix F: Natural and Cultural Heritage Values that are known or likely to occur on each property

- This table summarises heritage information for each property held in the Register of the National Estate database.
- The Department of Environment & Heritage used modelled species distributions and the knowledge of in-house fauna experts to assess the likely occurrence of EPBC listed species on each property.

The results of this initial analysis identified four Commonwealth properties that have significant conservation value namely, the International Radio Transmitting Station at Llandilo and military facilities at Orchard Hills, Holsworthy and Ingleburn. The locations of these properties in western Sydney are indicated at Appendix G.

Included in this initial analysis was a course of action that resulted in the Environment Minister writing to the relevant Commonwealth Ministers in June 2002 and inviting them to submit information to complete the review.

Information was received by the Department of Environment & Heritage in August 2002 from the Department of Transport & Regional Services in the form of a letter (Appendix I) and attached Environmental Management Plan for the International Radio Transmitting Station at Llandilo.

The Department of Environment & Heritage received information from the Department of Defence in December 2002 as described in Appendix J. This included heritage analysis of

Ingleburn, vegetation studies and maps of Holsworthy and the National Estate listing statement for Orchard Hills.

This resulted in further analysis being undertaken to determine the extent of the significance of the conservation values of the four Commonwealth properties identified during the initial analysis.

Following is a description of the conservation values of Commonwealth land at Llandilo, Orchard Hills, Holsworthy and Ingleburn.

3.1 Llandilo Conservation Values

Biodiversity Values

The place is one of the few substantial remnants of largely unmodified natural vegetation on the Cumberland Plain and surrounds radio transmitter facilities owned by the Federal Government. Llandilo contains one of the largest remnants of the natural vegetation of the Cumberland Plain. It includes communities characteristic of Wianamatta shale, Tertiary alluvium, and low lying recent alluvium, including the nationally endangered Cumberland Plain Woodland which is also endangered in NSW, Sydney Coastal River-flat Forest which is endangered in NSW, Castlereagh Ironbark Forest and Shale/Gravel Transition Forest. The co-occurrence of these community types and the relatively large size of the remnants within the place highlight its significance in the western Sydney region. The significance of the place is enhanced by its contiguity with remnant ecological communities contained within the Western Sydney Shale Woodland - St Marys, a place on the Register of the National Estate.

The remnant vegetation contains populations of a nationally endangered plant species, *Persoonia nutans*, three nationally vulnerable plant species *Pultenea parviflora*, *Dillwynia tenuifolia* and *micromyrtus minutiflora*, and two regionally significant species *grevillea juniperina* and *Dodonaea falcata*. *Persoonia nutans* and *Pultenea parviflora* are also endangered in NSW, and *Dillwynia tenuifolia*, *Grevillea juniperina* and *Micromyrtus minutiflora* are vulnerable in NSW.

The diversity and large size of the vegetation remnants at this place provide important habitat for native flora and fauna. Llandilo Natural Area is recognised as being of regional significance for fauna, especially Castlereagh Woodland birds.

Llandilo is listed on the Register of the National Estate for its natural values. It is possible that cultural values, both indigenous and non-indigenous, of National Estate significance may exist in this place.

As a result of information provided by the Department of Transport and Regional Services in August 2002, it is possible to conclude that Commonwealth land at Llandilo has the following conservation values.

The site contains populations of plant species that are listed under *Environment Protection & Biodiversity Conservation Act 1999* and the *Threatened Species Conservation Act 1995* (NSW). Significant communities of the nationally vulnerable *Pultanea parviflora*, *Dillwynia tenuiflora* and the NSW listed *Grevilia juniperina* are located throughout the site, particularly in the western and north-eastern sections of the site. The abundance of significant species is less in the southern section of the site due to its proximity to a residential area.

The eastern section of the site is characterised by a Cumberland Plain, Grey Box Woodland community. The tree layer contains mainly Grey Box (*Eucalyptus moluccana*) associated with occurrences of Scribbly Gum, forest red gum in the upper slopes and paperbark, *Casuarina glauca* and *Angophora floribunda* in the lower slopes. Ironbark (*Eucalyptus fibrosa*) occurs throughout this section. Shrub layer is composed mainly of the nationally vulnerable *Pultena parviflora*, as well as *Melaluca decora* and *Daviesia* sp. Kangaroo grass dominates the ground layer.

The western section of the site is characterised by a shale/gravel transition forest. The tree layer is characterised by iron bark, paperbark and grey box with some occurrences of Scribbly Gum and *Angophora floribunda*. The shrub layer is dominated by *Pultena parviflora*, *Dillwynia tenuiflora* and *Grevillea juniperina*. *Themeda australis*, *Dianella* sp, *Lomandra longifolia* and *Lepidosperma lateralee* dominate the ground layer.

Riparian areas occur on the site. Two creeks traverse the site and other areas of low depressions occur within the site as ephemeral drainages and freshwater reed swamps.

Many sightings of eastern grey kangaroos, Pink-eared duck, Laughing Kookaburra, Noisy Miner, Australian Magpie and Pied Currawong throughout the site. Other native animals that have been observed in nearby areas and are expected to inhabit the site are Common Brushtail Possum, Sugar Glider, Common Ringtail Possum and the Swamp Wallaby. Over 135 bird species have been recorded in the nearby Castlereagh Nature Reserve and many of these birds are likely to occur in the site because of its proximity to the reserve and similar habitat. The site has populations of *Lepidospermon poligalifolium*, *Acacia parramattensis* and *Acacia decurrens*, that when flowering, provide nectar (food source) for the rare jewel beetles *Stigmodera (Castiarina) flavovaria*, *Castiarina armata*, *Castiarina mimus* and *Castiarina luteocincta*.

Table 1: Llandilo Biodiversity Values listed under the EPBC Act

Threatened Ecological Communities	Status	Type of Presence
Cumberland Plain Woodlands	Endangered	Community likely to occur within area
Threatened Species	Status	Type of Presence
Birds		
Lathamus discolor Swift Parrot	Endangered	Species or species habitat may occur within area
Xanthomyza phrygia Regent Honeyeater	Endangered	Species or species habitat may occur within area
Fishes		
Macquaria australasica Macquarie Perch	Endangered	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling	Vulnerable	Species or species habitat likely to occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog	Vulnerable	Species or species habitat likely to occur within area
Litoria aurea Green and Golden Bell Frog	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
Dasyurus maculatus maculatus (s. lat.) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (south-east mainland and Tasmanian subspecies)	Vulnerable	Species or species habitat likely to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby	Vulnerable	Species or species habitat may occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland)	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Hoplocephalus bungaroides Broad-headed Snake	Vulnerable	Species or species habitat likely to occur within area
Plants		
Acacia bynoeana Bynoe's Wattle, Tiny Wattle	Vulnerable	Species or species habitat likely to occur within area
Dillwynia tenuifolia	Vulnerable	Species or species habitat may occur within area
Micromyrtus minutiflora	Vulnerable	Species or species habitat likely to occur within area
Persoonia nutans	Endangered	Species or species habitat likely to occur within area
Pultenaea parviflora	Vulnerable	Species or species habitat may occur within area

Table 1 (cont): Llandilo Biodiversity Values listed under the EPBC Act

Migratory Species	Status	Type of Presence
Migratory Terrestrial Species		
Birds		
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Migratory	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Migratory	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Migratory	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Migratory	Breeding may occur within area
<i>Xanthomyza phrygia</i> Regent Honeyeater	Migratory	Species or species habitat may occur within area
Migratory Wetland Species		
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Migratory	Species or species habitat may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Migratory	Species or species habitat may occur within area
Listed Marine Species	Status	Type of Presence
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<i>Lathamus discolor</i> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Listed - overfly marine area	Breeding may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area

3.2 Orchard Hills Conservation Values

Biodiversity Values

Orchard Hills is almost entirely vegetated with remnants and regenerating areas of Cumberland Plain Woodland and Sydney Coastal River Flat Forest. Cumberland Plain Woodland is listed as an endangered ecological community at both State and Commonwealth level. At State level, Sydney Coastal River Flat Forest is regarded as an endangered ecological community that is under represented in reserves. Orchard Hills is regarded as a core biodiversity area for conservation of both these communities. This site is listed on the Register of the National Estate for its natural values.

The place comprises the least disturbed and largest remaining remnant of Cumberland Plain Woodland. The size of the Orchard Hills remnant provides a comparatively large area of continuous habitat for species likely to be excluded from small and isolated remnants, particularly the Cumberland Plain Woodland bird community. Mature tree heights at Orchard Hills reach 50 metres and include some of the most outstanding examples of Forest Red gum trees remaining in western Sydney.

The tributaries of Blaxland Creek at Orchard Hills are among the least disturbed catchments remaining on the Cumberland Plain and on Wianamatta Shale in western Sydney. Blaxland Creek tributaries are richer in aquatic macro-invertebrate genera than most other creeks in western Sydney. The macro-invertebrate community of this catchment has a high representation of disturbance-sensitive species. Stoneflies, *Leptophlebiid* mayflies and pollution-sensitive families of caddisflies appear to be confined to such streams within the Cumberland Plain. Orchard Hills therefore acts as a refuge and reservoir of regional conservation significance for such species that are dependant on low levels of agricultural and urban development.

The bush thickknee (*Burhinus grallarius*), a rare bird, is listed as endangered in NSW and is regarded as a species of the greatest conservation concern in the Cumberland region. It has been recorded at Orchard Hills.

Orchard Hills has one plant listed as vulnerable in NSW, prickly spider-flower (*Grevillea juniperina*). Six other plant species are found in the place that is regarded as being of regional conservation significance. These are spreading bush-pea (*Pultenaea microphylla*), fuzzweed (*Vittadinia pustulata*), water-milfoil (*Myriophyllum simulans*), dwarf skull-cap (*Scutellaria humilis*), early nancy (*Wurmbea biglandulosa*) and the grass *Panicum obseptum*. An additional 32 plant species are found at Orchard Hills that are regarded as inadequately conserved in western Sydney.

The low level of disturbance in the tributaries of Blaxland Creek within Orchard Hills provide a valuable benchmark to measure the degradation of creek systems generally in western Sydney. The absence of fire at Orchard Hills for approximately 50 years provides an opportunity for ecological research on regenerating Cumberland Plain Woodland.

Biodiversity Values

Table 2: Orchard Hills Biodiversity Values listed under the EPBC Act

Threatened Ecological Communities	Status	Type of Presence
Cumberland Plain Woodlands	Endangered	Community likely to occur within area
Threatened Species	Status	Type of Presence
Birds		
Lathamus discolor Swift Parrot	Endangered	Species or species habitat may occur within area
Xanthomyza phrygia Regent Honeyeater	Endangered	Species or species habitat may occur within area
Fishes		
Macquaria australasica Macquarie Perch	Endangered	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling	Vulnerable	Species or species habitat likely to occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog	Vulnerable	Species or species habitat likely to occur within area
Mixophyes iteratus Southern Barred Frog, Giant Barred Frog	Endangered	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
Dasyurus maculatus maculatus (s. lat.) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (south-east mainland and Tasmanian subspecies)	Vulnerable	Species or species habitat likely to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby	Vulnerable	Species or species habitat may occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland)	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Hoplocephalus bungaroides Broad-headed Snake	Vulnerable	Species or species habitat likely to occur within area
Plants		
Cynanchum elegans White-flowered Wax Plant	Endangered	Species or species habitat likely to occur within area
Pomaderris brunnea Rufous Pomaderris	Vulnerable	Species or species habitat likely to occur within area

Table 2 (cont): Orchard Hills Biodiversity Values listed under the EPBC Act

Migratory Species	Status	Type of Presence
Migratory Terrestrial Species		
Birds		
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Migratory	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Migratory	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Migratory	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Migratory	Breeding may occur within area
<i>Xanthomyza phrygia</i> Regent Honeyeater	Migratory	Species or species habitat may occur within area
Migratory Wetland Species		
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Migratory	Species or species habitat may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Migratory	Species or species habitat may occur within area
Listed Marine Species	Status	Type of Presence
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<i>Lathamus discolor</i> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Listed - overfly marine area	Breeding may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area

Cultural Heritage values

The Orchard Hills Defence site is associated with the Mulgoa Irrigation Scheme established in 1890 by the Chaffey Brothers. At Orchard Hills there are remnants of the irrigation canal, and possible remains of the tunnel under Bringelly (now Northern) Road. The scheme was designed to pump water from the Nepean River and potentially irrigate extensive areas of land towards St Mary's. Stopped by the financial depression of the 1890s the remnants of the distribution canal are evidence of the importance of this area, and of the expansion of irrigation, in the late nineteenth century in NSW. It is possible that other historic national estate values may exist on this site.

3.3 Ingleburn Conservation Values

Biodiversity Values

The vegetation communities present on the site are important remnants of the vegetation communities once widespread on the Cumberland Plain. This site contains a significant proportion of those communities still present in western Sydney. The vegetation is comprised primarily of Cumberland Plain Woodlands, Sydney Coastal River-Flat Forest and a gradient between the two. Only 6% of the pre-1750 extent of Cumberland Plain Woodlands and 9% of the pre-1750 extent of Sydney Coastal River-Flat Forest remain. Despite the management history of the site, the vegetation remains as a good example of both communities. This large area of woodland habitat, particularly taken together with vegetation external to the site boundary, contributes significantly to the overall stock of Cumberland Plain Woodlands left to the west of Sydney and contributes to a local and regional bushland corridor with connections to other woodland areas to the north of the site. Cumberland Plain Woodland is listed as an Endangered Ecological Community under both the *Environment Protection and Biodiversity Conservation Act 1999* and the *NSW Threatened Species Act 1995*.

Sydney Coastal River Flat Forest is listed as an Endangered Ecological Community under Schedule 1 Part 3 of the NSW legislation. Some key diagnostic species for Cumberland Plain Woodlands identified on the site include forest red gum (*Eucalyptus tereticornis*), grey box (*E. moluccana*), stringybark (*E. eugenioides*), native cherry (*Exocarpos cupressiformis*), and the wattles (*Acacia falcata*, *A. implexa* and *A. decurrens*). Sydney Coastal River Flat Forest is represented by *Eucalyptus tereticornis* and *Casuarina glauca*. *Casuarina* is typically associated with saline estuarine situations; its distribution on the Cumberland Plain is therefore unusual and probably related to the presence of saline groundwater.

Three species listed under the *NSW Threatened Species Conservation Act 1995*, have been recorded within the place; eastern freetail-bat (*Mormopterus norfolkensis*), greater broad-nosed bat (*Scoteanax rueppelli*), and the large land snail (*Meridolum corneovirens*). The regionally significant brown toadlet (*Pseudophryne bibronii*), little eagle (*Hieraaetus morphnoides*), yellow-rumped thornbill (*Acanthiza chrysorrhoa*) and crested shrike-tit (*Falcunculus frontatus*) have been identified as using the vegetation communities.

Table 3: Ingleburn Biodiversity Values listed under the EPBC Act

Threatened Ecological Communities	Status	Type of Presence
Cumberland Plain Woodlands	Endangered	Community likely to occur within area
Threatened Species	Status	Type of Presence
Birds		
Lathamus discolor Swift Parrot	Endangered	Species or species habitat may occur within area
Xanthomyza phrygia Regent Honeyeater	Endangered	Species or species habitat may occur within area
Fishes		
Macquaria australasica Macquarie Perch	Endangered	Species or species habitat may occur within area
Prototroctes maraena Australian Grayling	Vulnerable	Species or species habitat likely to occur within area
Frogs		
Heleioporus australiacus Giant Burrowing Frog	Vulnerable	Species or species habitat likely to occur within area
Litoria aurea Green and Golden Bell Frog	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
Dasyurus maculatus maculatus (s. lat.) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (south-east mainland and Tasmanian subspecies)	Vulnerable	Species or species habitat likely to occur within area
Petrogale penicillata Brush-tailed Rock-wallaby	Vulnerable	Species or species habitat may occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland)	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
Hoplocephalus bungaroides Broad-headed Snake	Vulnerable	Species or species habitat likely to occur within area
Plants		
Cynanchum elegans White-flowered Wax Plant	Endangered	Species or species habitat likely to occur within area
Pimelea spicata	Endangered	Species or species habitat may occur within area
Pomaderris brunnea Rufous Pomaderris	Vulnerable	Species or species habitat likely to occur within area

Table 3 (cont): Ingleburn Biodiversity Values listed under the EPBC Act

Migratory Species	Status	Type of Presence
Migratory Terrestrial Species		
Birds		
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Migratory	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Migratory	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Migratory	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Migratory	Breeding may occur within area
<i>Xanthomyza phrygia</i> Regent Honeyeater	Migratory	Species or species habitat may occur within area
Migratory Wetland Species		
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Migratory	Species or species habitat may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Migratory	Species or species habitat may occur within area
Listed Marine Species	Status	Type of Presence
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<i>Lathamus discolor</i> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Listed - overfly marine area	Breeding may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area

Cultural Heritage Values

The Ingleburn Army Camp, one of Australia's major army camps from 1939-1970s, is of considerable historic significance as the first purpose-built infantry training camp for World War II. It played a central role in the mobilisation of Australia's citizens and in their military training throughout the war and was the assembly point for the first military contingent assembled for overseas service in the war. Ingleburn Army Camp is also significant for its role in the training of personnel for the Korean and Vietnam Wars. The Army Camp was a major centre in Australia for training under the National Service Scheme (1951-1972) and it is also associated with the anti-conscription movement. The Army Camp also played a major role in the training of Army Reserves from 1973 through to the 1990s.

Ingleburn Army Camp is of social significance as a symbol of the service given by generations of soldiers who trained there and as a place where respect for and remembrance of that service has become a continuing and highly valued tradition. It has social value to those who lived, and worked at the army camp. Ingleburn Army Camp has a long association with a State-wide "Army community", and is a place where this sense of community is expressed, celebrated and passed on.

The Sydney Williams Type Barracks (1939-1946) have a strong historic association with the war effort mounted by Australia for World War II. The huts are able to demonstrate aspects of military life at the camp. The barracks form a major part of the memories of the site for those who have been accommodated in them. The Kitchen/Dining Hall Complex, c1955, is historically significant for its association with the expansion of the camp as a training school after the Korean War and following the introduction of National Service. It illustrates the scale of the former Training School operations and the dining needs of large numbers of troops at a permanent camp site. It is visually prominent due to its location, size and clerestory roof line.

The Lecture Hall Building (former Recreation Centre), 1953, is of historical significance for its role as a recreation centre erected specifically for National Service trainees of non-commissioned rank and as an education facility in its use as part of the Second Training Group Headquarters facility. It is of social significance to National Servicemen as a former recreation facility and social centre and as a meeting place for army personnel. It is an example of architecture developed for military support structures after World War II. This building uses an unusual combination of arch-frame and standard hut construction techniques and is important for demonstrating efficient structural and acoustic design qualities for multi-purpose use.

The Bardia Barracks entrance precinct, comprising entrance gates, Guard House and Cell Block, Chaplain's Office and Post Office, is significant as a landmark for the local community symbolising the important role played by the Army in this area. The entry gates are associated with the establishment of military barracks on the site from 1939 and with Bardia Barracks in particular. The brick sentry boxes are symbolic of the military presence at the site. The Guard House and Cell Block are historically significant as part of Bardia Barracks, with the introduction of conscription and in particular, their use during the Vietnam War.

The Mont St Quentin Oval, entry gates and flagpole are of historical significance. The oval served as the original parade ground for WWII troops, and the location from which troops were formally farewelled and welcomed on return from service overseas. The Memorials located within the Ingleburn Military Heritage Precinct are historically significant, being associated with former military personnel and the regiments who have occupied the Army Camp.

3.4 Holsworthy Conservation Values

Biodiversity Values

This area contains a diversity of natural landscapes and vegetation types in a relatively unmodified condition, in an area otherwise greatly altered by urban development. Vegetation communities include plateau forest (covering forest and woodland on both tertiary alluvium soils and on shale), gully forest, woodland/heath complex, riparian forest, sedgeland, heath/swamp complex and melaleuca thickets. The laterite ridgetops are almost entirely intact and are significant reference sites that demonstrate the formation of laterite caps and the occupying vegetation communities.

Diversity of plant species is high, with more than 400 species recorded in the area. At least seven different plant communities have been distinguished in the area, indicating high community diversity. At least eight plant species considered rare nationally occur here: *Darwinia diminuta*, *D. grandiflora*, *Eucalyptus luehmanniana*, *Grevillea longifolia*, *Hibbertia nitida*, *Lomandra fluviatilis*, *Melaleuca deanei* (also listed as vulnerable under the EPBC Act) and *Tetratheca neglecta*. A rare and undescribed species of greenhood orchid (*Pterostylis* sp E) has also been recorded here.

The area contains a substantial remnant of Cumberland Plain woodlands, a vegetation type growing mainly on Wianamatta shale. Only 6% of the original area of Cumberland Plain woodlands remains. This community has been listed as an endangered ecological community under the NSW *Threatened Species Conservation Act 1995*. *Leucopogon exolasius*, found here, is listed as vulnerable under the *Environment Protection & Biodiversity Conservation Act 1999*. Regionally significant plants include *E. squamosa*, *Grevillea diffusa* and *Zornia dyctiocarpa*.

The broad headed snake (*Hoplocephalus bungaroides*), found in this area, is listed as vulnerable under the EPBC Act. The koala (*Phascolarctos cinereus*) population found locally is considered one of the few remaining viable populations in southern NSW. The area also contains a significant population of the spotted tailed quoll (*Dasyurus maculatus*). Both the koala and quoll are listed as vulnerable under the NSW *Threatened Species Conservation Act 1995*, together with the giant burrowing frog (*Heleioporus australiacus*) listed as vulnerable in the EPBC Act, red crowned toadlet (*Pseudophryne australis*), powerful owl (*Ninox strenua*) and greater broad nosed bat (*Scoteanax rueppellii*), all of which are recorded in the area. The New Holland mouse (*Pseudomys novaehollandiae*), considered to be regionally rare, is also found here together with a number of other fauna species of regional or State conservation significance. The area has areas of significant aesthetic values, particularly the forested creek gorges.

According to information provided by the Department of Defence, the Holsworthy Military Area has conservation value for a number of reasons.

- High species richness, high spatial variability and relatively undisturbed example of Sydney vegetation. Contains riverine communities (Riparian Scrub & Melaleuca Thickets), shale communities (Cumberland Plain Woodlands and Shale/Sandstone Transition Forest), Hawkesbury sandstone communities (Gully Forest, Sandstone Woodland, Woodland/Heath Complex and Sedgelands) and Tertiary alluvium communities (Castlereagh Scribbly Gum Woodland and Grey-box Ironbark Forest).
- Contains a large remnant of Cumberland Plain Woodland and this remnant represents an important part of this ecological community survival.

- Holsworthy is distinguishable from other sites around Sydney in having few exotic species.
- Land use of Holsworthy, has resulted in few areas of human disturbance. It represents an area of relatively undisturbed vegetation at the extreme west of the Woronora Plateau where rainfall is at its lowest and where it grades into the Cumberland Plain vegetation. This area complements the national parks to the east and forms an important element in the conservation of the water quality of the Georges River.

Table 4: Holsworthy Biodiversity Values listed under the EPBC Act

Threatened Ecological Communities	Status	Type of Presence
<u>Cumberland Plain Woodlands</u>	Endangered	Community likely to occur within area
<u>Shale/Sandstone Transition Forest</u>	Endangered	Community likely to occur within area
Threatened Species	Status	Type of Presence
Birds		
<u>Lathamus discolor</u> Swift Parrot	Endangered	Species or species habitat may occur within area
<u>Xanthomyza phrygia</u> Regent Honeyeater	Endangered	Species or species habitat may occur within area
Fishes		
<u>Prototroctes maraena</u> Australian Grayling	Vulnerable	Species or species habitat likely to occur within area
Frogs		
<u>Heleioporus australiacus</u> Giant Burrowing Frog	Vulnerable	Species or species habitat likely to occur within area
<u>Litoria aurea</u> Green and Golden Bell Frog	Vulnerable	Species or species habitat likely to occur within area
Mammals		
<u>Chalinolobus dwyeri</u> Large-eared Pied Bat, Large Pied Bat	Vulnerable	Species or species habitat may occur within area
<u>Dasyurus maculatus maculatus (s. lat.)</u> Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (south-east mainland and Tasmanian subspecies)	Vulnerable	Species or species habitat likely to occur within area
<u>Petrogale penicillata</u> Brush-tailed Rock-wallaby	Vulnerable	Species or species habitat may occur within area
<u>Potorous tridactylus tridactylus</u> Long-nosed Potoroo (SE mainland)	Vulnerable	Species or species habitat may occur within area
<u>Pteropus poliocephalus</u> Grey-headed Flying-fox	Vulnerable	Species or species habitat likely to occur within area
Reptiles		
<u>Hoplocephalus bungaroides</u> Broad-headed Snake	Vulnerable	Species or species habitat likely to occur within area
Plants		
<u>Acacia pubescens</u> Downy Wattle, Hairy Stemmed Wattle	Vulnerable	Species or species habitat likely to occur within area
<u>Caladenia tessellata</u> Thick-lipped Spider-orchid, Daddy Long-legs	Vulnerable	Species or species habitat likely to occur within area

Table 4(cont): Holsworthy Biodiversity Values listed under the EPBC Act

Threatened Species	Status	Type of Presence
Plants		
<i>Melaleuca deanei</i> Deane's Melaleuca	Vulnerable	Species or species habitat likely to occur within area
<i>Persoonia nutans</i>	Endangered	Species or species habitat likely to occur within area
<i>Pimelea spicata</i>	Endangered	Species or species habitat may occur within area
<i>Pterostylis saxicola</i> Sydney Plains Greenhood	Endangered	Species or species habitat likely to occur within area
Migratory Species	Status	Type of Presence
Migratory Terrestrial Species		
Birds		
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Migratory	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Migratory	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Migratory	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Migratory	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Migratory	Breeding may occur within area
<i>Xanthomyza phrygia</i> Regent Honeyeater	Migratory	Species or species habitat may occur within area
Migratory Wetland Species		
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Migratory	Species or species habitat may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Migratory	Species or species habitat may occur within area
Listed Marine Species	Status	Type of Presence
Birds		
<i>Gallinago hardwickii</i> Latham's Snipe, Japanese Snipe	Listed - overfly marine area	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	Listed	Species or species habitat likely to occur within area
<i>Hirundapus caudacutus</i> White-throated Needletail	Listed - overfly marine area	Species or species habitat may occur within area
<i>Lathamus discolor</i> Swift Parrot	Listed - overfly marine area	Species or species habitat may occur within area
<i>Monarcha melanopsis</i> Black-faced Monarch	Listed - overfly marine area	Breeding may occur within area
<i>Myiagra cyanoleuca</i> Satin Flycatcher	Listed - overfly marine area	Breeding likely to occur within area
<i>Rhipidura rufifrons</i> Rufous Fantail	Listed - overfly marine area	Breeding may occur within area
<i>Rostratula benghalensis s. lat.</i> Painted Snipe	Listed - overfly marine area	Species or species habitat may occur within area

Cultural Heritage Values

Indigenous values

The Holsworthy military area contains the Cubbitch Barta National Estate Area - occupies 18,000 ha of the Woronora Plateau, 30 km south-west of inner Sydney. It is very significant as a cultural and natural landscape that demonstrates relationships between the environment and human occupation through time

The Cubbitch Barta National Estate Area is highly valued by members of the Tharawal Local Aboriginal Land Council and the Dharawal people for its symbolic, cultural, educational and social associations. Numerous Aboriginal sites provide a glimpse of the relationship between people and the land prior to 1788. The sites and the area's long term and more recent connections with Aboriginal people, combine to form a landscape of great significance for its Indigenous heritage. The Aboriginal cultural landscape of the area reflects the past lifestyle of Aboriginal people in this region and its preservation enables Aboriginal people to maintain cultural links to the area. These connections with the past are particularly important, because Aboriginal people in this part of Australia were among the earliest impacted by European settlement of this continent and their culture has since been disrupted by war, disease and urban development.

Over 530 sites are known from the area and a further 509 potential archaeological sites have been documented. It is highly likely that the area contains many hundreds more sites. Sites include rock paintings and drawings, engravings, open scatters of artifacts, grinding grooves and scarred trees. The survival of a significant number of scarred trees within the area is important, as this is a rare type of site within the Sydney Basin. The preservation within the area of scarred trees, open artifact scatters and archaeological sites in particular, offer considerable potential for further developing a picture of day to day activities of Aboriginal people in the Sydney Basin prior to 1788.

The Georges River, which bounds the National Estate area on the west and is close to the north, has been identified as an important north-south Aboriginal cultural boundary within the Sydney Basin. The cultural landscape of the National Estate area is representative of the southern social unit of the Sydney Basin. This unit has been characterised by the presence of a number of distinctive traits within the art and by complex analyses that show that the art sites of this region are significantly different from those north of the Georges River. The large number of sites, the relatively high site density, the condition of sites and the preservation of the landscape as a whole make the area important in terms of the further definition of this southern unit.

In this region, it is uncommon to have such a landscape preserved in this way and particularly important, as knowledge of local groups from ethnohistory is often incomplete and problematic. The rich collection of more than 300 rock art sites within the area is regionally significant as a group in the Sydney Basin and representative of rock art south of the Georges River. The rock art sites are diverse in terms of technique (paintings, drawings and engravings) and motifs depicted. The long history of recording the rock art sites by voluntary groups and individuals indicates that they are aesthetically important to groups within the broader community.

The Cubbitch Barta National Estate Area is important as an illustration of a landscape in which changes in the relationship between Aboriginal people and early settlers took place. The area is associated with Governor Macquarie's war against the Aboriginal people of the Liverpool, Campbelltown and Appin areas from April to November 1816. Despite efforts to move Indigenous people away from this country, documentation indicates Aboriginal people were still visiting sites within the area in the 1830s.

Historic values

The settlement sites and transport routes in the area are associated with the history of nineteenth century European settlement and the development of agriculture in the Liverpool region, including the wine industry and subsistence farming in a bushland setting. The Grodno Settlement site is associated with the activities of migrants in the Liverpool region. The Cubbitch Barta National Estate Area also provides evidence of transport routes for settlers in the Liverpool, Holsworthy and Campbelltown areas. These demonstrate the transport linkages that connected the nineteenth century settlements, industry and farms to more established regions of Sydney.

Holsworthy is also significant for its military associations. It was a training site for Australian troops and horses engaged in World War One battles, including Gallipoli. The Holsworthy Military Training Area is also significant for the training activities of the Australian Army after World War Two. The Old Army Internment Camp Group was used to inter Germans and other Europeans, from 1914-19. The internment of migrants in Australia followed Britain's foreign nationals policy during World War One and this site reflects Australia's strong defence links with Britain. It reflects concerns that spies and invasion threatened Australia's war effort and National security. The Old Army Internment Camp Group also indicates the impact of World War One on Australia's home front when men were interned.

The Old Army Internment Camp Group is associated with the history of Federation. The acquisition of its remaining buildings in 1913 was part of the Commonwealth Government's major program of defence construction for Australia. The Old Army Internment Camp Group survives as evidence of the largest internment camp in Australia during World War One. The guard buildings and structures are rare in demonstrating the guards' section of a World War One internment camp in Australia and are also significant because German and other European internees constructed them.

This Group has important associations for those who trained there during World War Two and who more recently undertook National Service Training or permanent Army service there during its use as a military camp. It has similar associations for members of the World War One Light Horse Regiments and their families and descendants. It has strong associations for former internees. It also has important associations for Australians as a reminder of a period of conflict and troubled National identity, involving a deep suspicion of non-British immigrants at that time.

4. DISCUSSION

The above analysis was compared with the results of a scientific assessment of the conservation significance of native vegetation of the Cumberland Plain in western Sydney undertaken by the NSW National Parks and Wildlife Service (NPWS) that was published in October 2002. It was noted that the results were similar and that the assessment by the NSW NPWS identified Commonwealth land at Llandilo, Orchard Hills, Holsworthy and Ingleburn as areas of high conservation significance since they contained habitat that could constitute the backbone of a viable regional conservation network or area where endangered ecological communities are at risk of local extinction.

According to the NSW NPWS, these areas of high conservation significance contain native vegetation remnants of 10 hectares or more and where the canopy cover is >10%. Presented below is a table indicating what proportion of each of the four Commonwealth properties is of high conservation significance, as determined by the NSW NPWS.

Table 5: Proportion of Commonwealth land with high conservation significance

	Total Area	Area of High Conservation Significance
Llandilo	558.7 ha	415.5 ha (74.3%)
Orchard Hills	1970.1 ha	580.6 ha (29.4%)
Holsworthy	18469.7 ha	846.9 ha (4.5%)
Ingleburn	310.7 ha	86.8 ha (27.9%)

Properties with highly significant natural values

The results clearly identify the following properties as containing significant natural values:

- Llandilo (Airservices Australia);
- Orchard Hills (Defence);
- Holsworthy (Defence) – the northern portion of this very large holding; and
- Ingleburn (Defence).

A summary of the biodiversity values for the identified properties is tabled below.

Table 6: Summary of Biodiversity values listed under the EPBC Act

	Endangered Ecological Communities	Threatened Species		Migratory Avian Species		
		Fauna	Flora	Terrestrial	Wetland	Marine
Llandilo	1	12	5	6	2	8
Orchard Hills	1	12	2	6	2	8
Holsworthy	2	11	6	6	2	8
Ingleburn	1	12	3	6	2	8

All four properties contain:

- Important remnants of vegetation communities once widespread on the Cumberland Plain.
- Diverse and relatively large areas of remnant vegetation that provides important habitat at the regional and national scale for native flora and fauna.
- Ecological communities listed as endangered under the *Environment Protection & Biodiversity Conservation Act 1999* and the *NSW Threatened Species Conservation Act 1995*. For example, Cumberland Plain Woodland occurs on all four properties.
- Remnant vegetation that:
 - contains populations of threatened flora species (Commonwealth and NSW listed);
 - provides habitat for threatened fauna species (Commonwealth and NSW listed); and
 - provides habitat for migratory avian species of national (Commonwealth listed) and international importance (JAMBA & CAMBA).
- Core biodiversity areas of western Sydney.
- Places listed on the Register of the National Estate. Orchard Hills and Llandilo for their natural values. Holsworthy and Ingleburn for their cultural heritage values.

Maps identifying areas of significant natural conservation values on the above properties are at Appendices J, K, L & M.

Properties without highly significant natural values

Based on available information, flora and fauna on the other 24 Commonwealth properties are not considered to be of similar levels of significance as the above four properties. In most cases we believe that these values could be protected through appropriate site planning and covenanting under local government or NSW Government laws.

Cultural Heritage Values

It should be noted that three of the above identified properties also contain significant identified cultural heritage values. Holsworthy contains two places on the Register of the National Estate; ‘Cubbitch Barta’ listed for its indigenous values and ‘The Old Army Internment Camp Group’ listed for its historic values. Ingleburn contains ‘The Ingleburn Army Camp’, listed on the national estate for its historic significance. While Orchard Hills has been listed on the basis of its natural values it does contain national estate historic values – the Mulgoa Irrigation Scheme.

Conservation Agreements

One of the major threats to the biodiversity of western Sydney is the loss, degradation and fragmentation of vegetation from urbanisation. The Commonwealth’s National Vegetation Framework outlines a national approach to the management of native vegetation. One of the key outcomes of this Framework is the reversal in long-term decline in extent and quality of Australia’s native vegetation cover by:

- conserving native vegetation and substantially reducing land clearing; and
- conserving Australia’s biodiversity.

As a result of this review, there now exists an opportunity to conserve the areas of high conservation significance on each of the four Commonwealth properties. This can be achieved through the establishment of conservation agreements for each of the sites in

accordance with Part 14 of the *Environment Protection & Biodiversity Conservation Act 1999*. Conservation agreements are agreements whose primary object is to enhance the conservation of biodiversity. They may relate to private or public land. A conservation agreement is legally binding on:

- (a) the Commonwealth; and
- (b) the person or persons with whom the Minister entered into the agreement on behalf of the Commonwealth; and
- (c) anyone else who is a successor to the whole or any part of any interest that a person mentioned in (b) had, when the agreement was entered into, in any place covered by the agreement.

The Environment Minister may invite the Commonwealth Ministers responsible for the identified sites to enter into conservation agreements. The Minister for Transport and Regional Services is responsible for Llandilo and the Minister for Defence is responsible for the remaining sites; Orchard Hills, Holsworthy and Ingleburn. Following acceptance of the invitation to enter into conservation agreements, the Department of Environment & Heritage would commence action to draft the activities to promote the protection and conservation of biodiversity on the site.

As occurred earlier in this review of Commonwealth land, the Department of Environment & Heritage will consult with the Department of Defence and the Department of Transport & Regional Services in the drafting of the activities to be contained within the conservation agreements.

Accordingly, the implementation of the conservation agreements would:

- Result in a net benefit to the environment of western Sydney through the protection of up to 1930 hectares of land that contains endangered ecological communities and/or, provides habitat for threatened and migratory species.
- Further demonstrate the Commonwealth's action in reversing the decline in native vegetation by using its environmental regulatory controls where it has jurisdiction.
- Ensure that future development of such land is compatible with good conservation practice.
- Contribute to one the Government's 2001 election commitments concerning the provision of increased certainty for land-holders through conservation agreements under the *Environment Protection & Biodiversity Conservation Act 1999*.

5. CONCLUSION

The Department of Environment & Heritage has completed a desk-top review of the conservation values of Commonwealth properties in Western Sydney and identified four properties of high conservation value that warrant conservation; Llandilo, Orchard Hills, Holsworthy and Ingleburn. Protection of these sites will ensure the maintenance of their environmental values and the ecological sustainable development of Commonwealth land.

To achieve the above outcomes it is recommended that the Environment Minister write to the Minister for Transport & Regional Services in relation to Llandilo and the Minister for Defence in relation to Orchard Hills, Ingleburn and Holsworthy, inviting them to enter into conservation agreements in accordance with Part 14, section 305 of the *Environment Protection & Biodiversity Conservation Act 1999*.