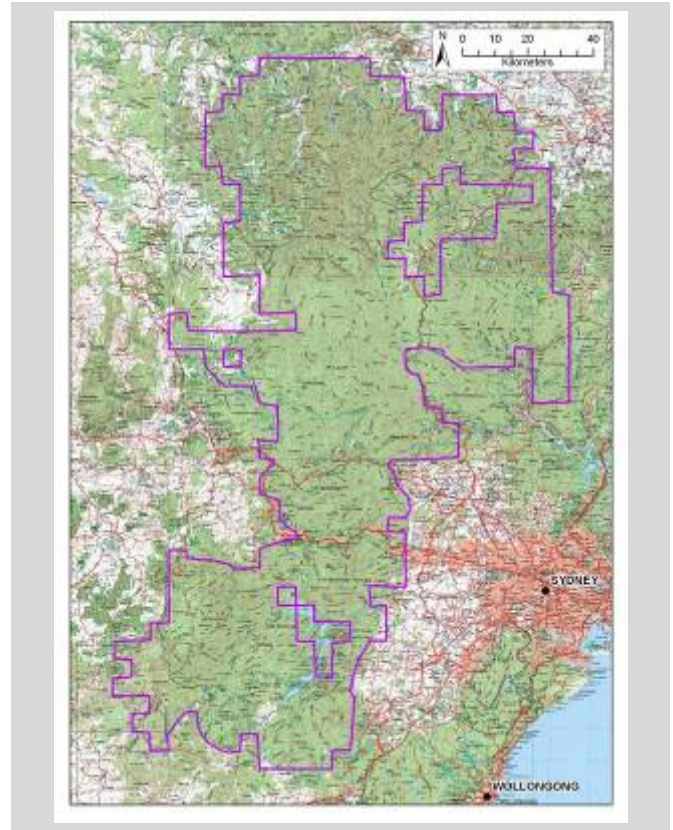


The Greater Blue Mountains Area

MAINLAND ISLAND CHARACTERISTICS

Jurisdiction	New South Wales
NRM Regions	Central West, Hawkesbury/Nepean, Hunter/Central Rivers, Lachlan
LGAs	Blue Mountains, Cessnock, Gosford, Hawkesbury, Lithgow, Mid-Western Regional, Muswellbrook, Oberon, Penrith, Singleton, Upper Hunter, Upper Lachlan Shire, Wingecarribee, Wollondilly
Size	1, 181, 000 hectares
Dominant Type	Eucalypt open forests
Land Tenure	World Heritage Area Limited private landholdings
Surrounding Issues	Land use Pest density Weed density



Overall Priority	Conservation Value	Threat Status
Very High	Very High	Very High

Key Biodiversity Values

Key biodiversity and conservation values of THE GREATER BLUE MOUNTAINS AREA

- 80 threatened species
- 7 threatened communities
- 10 migratory species
- Very high species richness
- Very high endemism
- The Greater Blue Mountains World Heritage Area
- The Greater Blue Mountains Area National/Commonwealth Heritage Place
- 2 nationally important aquatic ecosystems
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE

Categories	Ranks/Scores
1 Biodiversity values	Very High (16)
2 Uniqueness	Very High (4)
3 Representativeness	Very High (4)
4 Adjacency	High (3)
5 Area to perimeter ratio	Medium (2)

THREAT STATUS

Categories	Ranks/Scores
1 Density of pest species	Very High (8)
2 Pest impact level	Very High (8)
3 Invasion fronts/range boundaries	Very High (4)
4 Land use risk	Very High (5)
5 Weed density	Very High (4)
6 Area without statutory protection	High (3)



Key Threats and Impacts

Pest Species Present or Potentially Present

<input type="checkbox"/>	Cane toad	<input checked="" type="checkbox"/>	Feral cat	<input checked="" type="checkbox"/>	Feral pig	<input checked="" type="checkbox"/>	Rodents
<input checked="" type="checkbox"/>	Carp, European carp	<input checked="" type="checkbox"/>	Feral deer	<input type="checkbox"/>	Feral water buffalo	<input type="checkbox"/>	Tilapia, Mozambique Tilapia
<input checked="" type="checkbox"/>	European red fox	<input checked="" type="checkbox"/>	Feral donkey	<input checked="" type="checkbox"/>	Indian Myna, Common Myna	<input checked="" type="checkbox"/>	Weather loach; Oriental weather loach
<input checked="" type="checkbox"/>	European wild rabbit	<input checked="" type="checkbox"/>	Feral goat	<input checked="" type="checkbox"/>	Mosquito fish, Plague Minnow	<input checked="" type="checkbox"/>	Wild dog
<input type="checkbox"/>	Feral camel	<input checked="" type="checkbox"/>	Feral horse	<input checked="" type="checkbox"/>	Red-eared slider turtle	<input type="checkbox"/>	Other

Potential impacts of pest species on matters of National Environmental Significance

Carp, European carp	<i>Litoria booroolongensis</i>	Mosquito fish, Plague Minnow	
Feral cat	<i>Leipoa ocellata</i>	<i>Litoria aurea</i>	<i>Macquaria australasica</i>
<i>Apus pacificus</i>	<i>Litoria aurea</i>	<i>Litoria booroolongensis</i>	<i>Mixophyes balbus</i>
<i>Eulamprus leuraensis</i>	<i>Monarcha melanopsis</i>	Feral goat	<i>Hoplocephalus bungaroides</i>
<i>Heleioporus australiacus</i>	<i>Petrogale penicillata</i>	<i>Cynanchum elegans</i>	<i>Leipoa ocellata</i>
<i>Hoplocephalus bungaroides</i>	<i>Potorous tridactylus tridactylus</i>	<i>Diuris aequalis</i>	<i>Paralucia spinifera</i>
<i>Isoodon obesulus obesulus</i>	<i>Pseudomys oralis</i>	<i>Homoranthus darwinoides</i>	<i>Petrogale penicillata</i>
Temperate Highland Peat Swamps on Sandstone		<i>Pultenaea</i> sp. Genowlan Point (Allen s.n. Nov 1997)	
Feral deer	<i>Cynanchum elegans</i>	Feral horse	<i>Diuris aequalis</i>
Wild dog	<i>Merops ornatus</i>	Feral pig	<i>Mixophyes iteratus</i>
<i>Isoodon obesulus obesulus</i>	<i>Petrogale penicillata</i>	<i>Cynanchum elegans</i>	<i>Paralucia spinifera</i>
<i>Leipoa ocellata</i>	<i>Potorous tridactylus tridactylus</i>	<i>Diuris sheaffiana</i>	<i>Restio longipes</i>
Temperate Highland Peat Swamps on Sandstone		<i>Isoodon obesulus obesulus</i>	<i>Trachymene saniculifolia</i>
European red fox	<i>Litoria aurea</i>	Temperate Highland Peat Swamps on Sandstone	
<i>Gallinago hardwickii</i>	<i>Merops ornatus</i>	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	
<i>Heleioporus australiacus</i>	<i>Petrogale penicillata</i>	European wild rabbit	<i>Petrogale penicillata</i>
<i>Hoplocephalus bungaroides</i>	<i>Potorous tridactylus tridactylus</i>	<i>Cynanchum elegans</i>	Temperate Highland Peat
<i>Isoodon obesulus obesulus</i>	<i>Pseudomys oralis</i>	<i>Diuris sheaffiana</i>	Swamps on Sandstone
<i>Leipoa ocellata</i>	<i>Rostratula australis</i>	<i>Homoranthus darwinoides</i>	<i>Thesium australe</i>
Temperate Highland Peat Swamps on Sandstone		<i>Leipoa ocellata</i>	<i>Xanthomyza phrygia</i>

Other threatening processes

- Situated on pest invasion front / range boundary
- High risk land use
- High density of Weeds of National Significance
- Lack of statutory protection
- Increased potential for edge effects

Highest priority biodiversity issues

Pest impacts on *Leipoa ocellata*, *Petrogale penicillata*, *Cynanchum elegans*, *Isoodon obesulus obesulus* and Temperate Highland Peat Swamps

Pest management actions listed in recovery plans for *Leipoa ocellata*, *Paralucia signifera*, *Pseudomys oralis*, *Eulamprus leuraensis*, *Mixophyes iteratus*, and *Xanthomyza phrygia*



CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME

Need for vertebrate pest management	<p>Management of vertebrate pests is required in order to protect and conserve the natural and cultural heritage values of the Greater Blue Mountains World Heritage Area in order to meet Australia's international obligations as a signatory nation to the World Heritage Convention. Management is also required to ensure the Australian World Heritage management principles are met as prescribed under the <i>Environment Biodiversity and Conservation Act 1999</i>.</p> <p>Portions of the GBMWhA are also classed as Special Areas under the <i>Sydney Water Catchment Management Act 1998</i>, providing one of the main water sources for Sydney. The management of wild horses in this area is a key factor in maintaining the water quality of the catchment.</p>
Planning instruments	<p>Key planning/management documents for the Greater Blue Mountains World Heritage area that address pest control measures include;</p> <ul style="list-style-type: none"> Blue Mountains Region Draft Pest Management Strategy (2007-2010) Greater Blue Mountains World Heritage Area draft Strategic Plan 2005 Special Areas Strategic Plan of Management (SCA and NPWS) <p>Separate Plans of Management for National Parks and Reserves within the World Heritage Area include localised management measures for pest control including;</p> <ul style="list-style-type: none"> Thilmer Lakes National Park Plan of Management 1997 Wombeyan Karst Conservation Reserve Plan of Management 1999 Kanangra-Boyd National Park Plan of Management 2001 Wollemi National Park Plan of Management 2001 Yengo National Park and Parr State Conservation Area Draft Plan of Management 2001 Blue Mountains National Park Plan of Management 2001 Nattai Reserves Plan of Management 2001 Gardens of Stone Draft Plan of Management 2004 Jenolan Karst Conservation Reserve Draft Plan of Management 2006 <p>There are also several threatened species recovery plans for plant and animals within the GBMWhA.</p>
Management actions	<p>Numerous actions to control pests such as foxes, pig, goat, cats, horses, dogs are currently undertaken by the NSW Parks and Wildlife Service and the Sydney Catchment Authority as per the Management Plans listed above. Funded pest control projects include;</p> <ul style="list-style-type: none"> 'Protecting Values of the Blue Mountains World Heritage Area' Project - Hawkesbury Nepean Catchment Management Authority. Aims to manage "downstream" impacts that can enter the park from private property such as feral animals, weeds, sediment. SCA Wild Horse Draft Management Plan
Monitoring regimes	<p>Numerous actions to monitor pests such as foxes, pig, goat, cats, horses, dogs are currently undertaken by the NSW Parks and Wildlife Service and the Sydney Catchment Authority as per the Management Plans listed above.</p>
Management responsibility	<ul style="list-style-type: none"> NSW Department of Environment and Climate Change NSW National Parks and Wildlife Service Greater Blue Mountains Aboriginal Reference Group Jenolan Caves Reserves Trust
Cost-benefit analysis	<p>The NSW Invasive Species Plan highlights that pest management will be prioritized in areas where it provides the best cost to benefit ratio in protecting biodiversity, productivity and community most threatened by invasive species.</p>
Special features	<p>The Greater Blue Mountains World Heritage Area is co-managed between the Department of Environment and Climate Change and the Greater Blue Mountains Aboriginal Reference Group (GBMARG). The GBMARG represents the Darkinjung, Darug, Dharawal, Gundungurra, Wanarua and Wiradjuri people of the GBMWhA. The ARG assist in achieving the conservation goals of these groups.</p> <p>The Blue Mountains World Heritage Institute aims to facilitate research and community engagement which supports the conservation of the natural and heritage values of the World Heritage Area (BMWHI, 2009).</p>
Summary / comments	<p>Pest management is a major issues for the Greater Blue Mountains WHA, however, the numerous control actions appear to be well coordinated, due to the large jurisdictional area of NPWS.</p>

References:

Blue Mountains World Heritage Institute (2009) *The Blue Mountains World Heritage Institute*. Viewed. 21 May 2009.
<http://bmwhi.org.au/what/what-main.html>

NSW Department of Primary Industries (DPI) (2008) *NSW Invasive Species Plan 2008-1015*, NSW DPI, Orange.
Available on-line at: <http://www.dpi.nsw.gov.au/agriculture/pests-weeds/nsw-invasive-species-plan>

National Park Management Plans are available on-line at:
<http://www.environment.nsw.gov.au/parkmanagement/ParkAndFireManagementPlansByCategory.htm>

