Melbourne

MAINLAND ISLAND CHARACTERISTICS	
Jurisdiction	Victoria
NRM Regions	Corangamite Port Phillip and Western Port
LGAs	33 (see list below)
Size	591, 000 hectares
Dominant Type	Eucalypt woodlands
Land Tenure	Urban Agriculture
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 MELBOURNE

- 46 threatened species
- 2 threatened communities
- 23 migratory species
- Very high species richness
- Very high endemism
- Radar Hill Grey Box Forest National/Commonwealth Heritage Place
- Edithvale-Seaford Ramsar wetland
- 1 nationally important aquatic ecosystem
- Native vegetation present
- Vertebrate pest species present

CONSERVATION VALUE	
Categories	*Ranks/Scores*
1 Biodiversity values	High (12)
2 Uniqueness	Medium (2)
3 Representativeness	Very High (4)
4 Adjacency	Very High (4)
5 Area to perimeter ratio	Very High (4)

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	High (3)
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							
☐	Cane toad	☒	Feral cat	☒	Feral pig	☒	Rodents
☒	Carp, European carp	☒	Feral deer	☐	Feral water buffalo	☐	Tilapia, Mozambique Tilapia
☒	European red fox	☒	Feral donkey	☒	Indian Myna, Common Myna	☒	Weather loach; Oriental weather loach
☒	European wild rabbit	☒	Feral goat	☒	Mosquito fish, Plague Minnow	☒	Wild dog
☐	Feral camel	☒	Feral horse	☒	Red-eared slider turtle	☐	Other

Potential impacts of pest species on matters of National Environmental Significance

Carp, European carp

Galaxiella pusilla
Litoria raniformis
Nannoperca obscura

Feral cat

Delma impar
Isoodon obesulus obesulus
Macronectes giganteus
Macronectes halli
Perameles gunnii unnamed subsp.
Neophema chrysogaster
Potorous tridactylus tridactylus
Pseudomys fumeus

Wild dog

Isoodon obesulus obesulus
Pseudomys fumeus
Perameles gunnii unnamed subsp.
Sterna albifrons
Potorous tridactylus tridactylus

Rodent

Diuris fragrantissima

Feral pig

Isoodon obesulus obesulus
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

Mosquito fish, Plague Minnow

Galaxiella pusilla
Litoria raniformis
Macquaria australasica
Nannoperca obscura

European red fox

Delma impar
Edithvale-Seaford Wetlands
Gallinago hardwickii
Isoodon obesulus obesulus
Macronectes giganteus
Neophema chrysogaster
Perameles gunnii unnamed subsp.
Potorous tridactylus tridactylus
Pseudomys fumeus
Rostratula australis
Sterna albifrons

European wild rabbit

Delma impar
Edithvale-Seaford Wetlands
Lepidium hyssopifolium
Macronectes giganteus
Macronectes halli
Neophema chrysogaster
Perameles gunnii unnamed subsp.
Prasophyllum frenchii
Pseudomys fumeus
Senecio macrocarpus
Synemon plana
Pimelea spinescens subsp. spinescens

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

Highest priority biodiversity issues

Pest impacts on *Isoodon obesulus obesulus*, *Perameles gunnii* unnamed subsp. and *Pseudomys fumeus*

Pest management actions listed in recovery plans for *Pseudomys fumeus*, *Delma impar*, *Caladenia amoena* and *Diuris fragrantissima*

Impacts of rabbits and foxes

CRITICAL SYNOPSIS OF VERTEBRATE PEST MANAGEMENT REGIME	
Need for vertebrate pest management	All land holders and managers have a duty of care under the Victorian *Catchment and Land Protection Act 1994*. They are therefore expected to control pests on their lands and ensure that pests do not impact on other land or waters.
Planning instruments	There is no single planning instrument which covers pest management for the Melbourne mainland island. Pest management is regulated under the *Catchment and Land Protection Act 1994* and pest species management is undertaken in accordance with the Victorian Pest Management Framework (VPMF). Several recovery and threat abatement plans apply to species found within this island. Regional Rabbit Action Plans have been prepared by the relevant Catchment Management Authorities.
Management actions	Primarily, management actions within the Melbourne mainland island are the responsibility of private landholders and state agencies (on the land they manage e.g. Brisbane Ranges National Park). The Good Neighbour Program has implemented rabbit control programs at a number of sites within the Melbourne mainland island (DSE 2008).
Monitoring regimes	Monitoring of pest management activities is undertaken by: • CMAs and the Victorian Catchment Management Council as part of their statutory responsibilities and • DSE to meet regional and State economic and environmental requirements There is recognition of the need to monitor emerging pest threats if establishment and spread are to be prevented.
Management responsibility	Private land holders State agencies e.g. Department of Sustainability and Environment, Department of Primary Industries
Cost-benefit analysis	The VPMF highlights that pest management must occur within a risk framework. In particular, an assessment of the economic, environmental and social risks posed by pests and the costs and benefits of addressing those risks must be undertaken.
Special features	Brisbane ranges Nation Park was ranked as high-medium priority for rabbit management in a prioritisation for Victorian National Parks (Long *et al.* 2003).
Summary / comments	Management across a wide area that is dominated by private land holdings and urban environments is a major challenge to pest management. Overall, the Victorian government is seeking ways to improve the accountability of private land holders for pest management and to develop integrated and regional pest management approaches.

LGA list:

Banyule	Manningham
Bayside	Maribyrnong
Boroondara	Melbourne
Brimbank	Melton
Cardinia	Mitchell
Casey	Monash
Darebin	Moonee Valley
Frankston	Moorabool
Glen Eira	Moreland
Golden Plains	Nillumbik
Greater Dandenong	Port Phillip
Greater Geelong	Stonnington
Hume	Surf Coast
Kingston	Whitehorse
Knox	Whittlesea
Macedon Ranges	Wyndham
	Yarra

References:

Long K, Robley, A, Cheal D, White M, Carter O, Tolsma A and Oates A (2003) *Prioritisation of Rabbit Control Within the Parks Victoria Estate: Reducing Risks to Environmental Values*, Arthur Rylah Institute for Environmental Research, Victoria.

DSE (2008) *Good Neighbour Program Achievement Report 2007-2008*, Department of Sustainability and Environment, Victoria.

State of Victoria (2002) Victorian Pest Management – A Framework for Action, Department of Natural Resources and Environment, Victoria. Available on-line at: http://www.dse.vic.gov.au/CA256F310024B628/0/A40478A9AD5E783FCA257457001599F1/$File/VPMFMain.pdf