



# Noxious Weed and Pest Animal Management Strategy 2009-2014

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## 1. Introduction

Council is required to develop, implement, co-ordinate and review its noxious weed control policies and noxious weed control programs under Section 36 of the *Noxious Weeds Act 1993* (the Act). Council adopted a Noxious Weed Strategy in June 1998, and has been progressively updating and improving its Noxious Weed Management Program since that time. The 2009-14 Noxious Weed and Pest Animal Strategy is a review of the 2003 Noxious Weed Strategy with the addition of a pest animal management component, establishing a strategic direction for pest animal management activities within the Campbelltown LGA over the period 2009-2014.

## 2. Reasons for Strategy

### **2.1. *Reduce economic costs to the community as a result of noxious weeds and pest animals***

Noxious weeds in New South Wales cost an estimated \$600 million per annum in control and lost production alone (NSW DPI). This includes the cost to Councils and private landowners of weed control programs through herbicide applications and mechanical controls. The presence of noxious weeds can also diminish the aesthetic appeal of an area which is one of the principal drivers of tourism, as well as lead to a loss of biodiversity, harbour pest animals and diminish quality of our waterways. A further economic burden includes that placed on the medical system for the treatment of health problems (in particular allergies) as a result of certain weeds. Pest animal management costs are equally significant, if not more costly. Pest animal impacts can be wide ranging, with serious damage affecting agricultural and livestock industries, native flora and fauna populations and habitat functioning. It has been estimated that several major pest species (rabbits, foxes, pigs, cane toads) have negative impacts approximating \$720 million per annum. Some introduced pests have naturalised in parts of Australia and have led to some disastrous environmental problems, such as plagues of rabbit or land infestations of common prickly pear.

### **2.2. *Assist Council in meeting its Vision, Mission and Principle Activities***

This Strategy is aligned with Council's Management Plan, Section Business Plans and Council's Charter.

The vision Campbelltown City Council has for the city of Campbelltown is:

*"A City of Choice and Opportunity in a Natural Environment"*

This Strategy aligns with Council's Corporate Plan Objectives. The following of Council's Corporate Plan Objectives and Principle Activities pertain to this Strategy:

*Council's Corporate Plan 2.7*

Principle Activity 1: Preserving Our Hills, Rivers and Bushland

Principle Activity 2: Strategically Managing our Civic Assets (Environmental Assets) and Infrastructure

#### *Finance and Management 4.12*

Environmental Statement, in particular the: Land Improvement Program; Water Improvement Program; Environmental Education Program and Environmental Protection.

(Objective 3.1) To conserve and enhance the quality of Campbelltown's natural environment, its natural resources and ecological processes.

(Objective 3.2) To identify and protect all natural, physical and cultural heritage sites in the City ensuring they are maintained for future generations.

(Objective 3.3) To have in place programs and strategies that will address noise, air and water quality in the City area.

This Strategy is aligned with a number of linkage documents (Appendix 1), including:

- SMCMA Catchment Action Plan through target B5 "Invasive Species Threats":
  - *"By 2016, the impact of invasive species on biodiversity is reduced by decreasing the number, distribution and impact of terrestrial and aquatic invasive weeds and pest animals; and by promoting a better understanding of invasive pathogens."*
- NSW Invasive Species Plan 2008-2015 through its Vision Statement:
  - *"The environment, economy and community of NSW are protected from the adverse impacts of invasive species"* and the following goals:
    - Goal 1: Exclude (prevent the establishment of new invasive species)
    - Goal 2: Eradicate or contain (eliminate, or prevent the spread of new invasive species)
    - Goal 3: Effectively manage (reduce the impacts of widespread invasive species)
    - Goal 4: Capacity Building (ensure NSW has the ability and commitment to manage invasive species)
- Australian Weeds Strategy through the following goals:
  - Goal 1: Prevent new weed problems
  - Goal 2: Reduce the impact of existing priority weed problems
  - Goal 3: Enhance our capacity and commitment to solve weed problems

High Priority Weed Alerts-Weed Alerts in Sydney-these are priority weeds for CCC management

If these are found, have an action table for what to do, and a cost associated with initial control-request this money from council  
Noxious and Environmental Weeds

### **3. Strategic Direction**

CCC's strategic direction for weed control, for both noxious and environmental species, is to:

- **assess** the source of weed infestation,

- **control** weeds in high priority settings (CCC Biodiversity Strategy) and within the various Plans of Management for Parks and Reserves,
- conduct routine private property **inspections**, and
- **integrate pest control** (harbour removal, weed dispersal) where practical.

This Strategy places a high priority on integration with:

- **Plans of Management** (specific Parks and Reserves and management actions),
- **Biodiversity Strategy** (for identification of priority work sites and key weed and pest animal threats),
- **Environmental Education Strategy** (weed and pest animal public education campaigns)
- **Existing** Council programs and works schedules.

## 4. Strategic Objectives

This Strategy seeks to realise the following Objectives:

**Objective 1:** To build and maintain Councils human resource (staffing), financial (funding), and technical capabilities (skills and knowledge) and functionality in order to manage noxious weeds and pest animals.

**Objective 2:** To raise community awareness of the impacts that noxious weeds and pest animals have on the Campbelltown environment.

**Objective 3:** To assess, contain and/or reduce the impact of new and existing invasive species incursions on the Campbelltown environment.

**Objective 4:** To promote and increase landholder commitment to noxious weed and pest animal management.

These Objectives and associated Actions (described in more detail in the Operational Plan) are linked in with various regional, State and internal documents, plans and policies.

Objective realisation will be achieved via the implementation of the following operational programmes (described in more detail in the Operational Plan):

1. Pesticide Notification and Recording Programme
2. Communication, Education and Extension Programme
3. Administration Programme
4. Noxious Weed and Pest Animal Recording, Mapping and Surveying Programme
5. Noxious Weed and Pest Animal Control Programme
6. Noxious Weed Private Property Inspection Programme

## 5. Weed and Pest Animal Priorities

Council's Noxious Weeds Officer, in collaboration Liverpool City Council's Weeds Officer, performed a NSW Weed Risk Assessment (developed by the Department of Industry and Investment) on those weed species (noxious and environmental) that are considered to be:

- Locally problematic,
- high priority for control,
- have potential for further spread,
- have a high community profile.

The NSW Weed Risk Assessment aims to provide a standard, nationally accepted and transparent process to help make decisions about weed management. It can be applied at the state, regional, catchment and local government levels.

The Weed Risk Assessment generates a 'weed risk' score and 'feasibility for coordinated control' score. A risk assessment table for determining priorities is attached as appendix 1.

This strategic assessment informs Council's targeted and considered Noxious Weed Management Operational Program.

### **5.1. Weed (Noxious and Environmental based on Risk Assessment) and Pest Animal Management Priorities**

Priority weeds have been categorised into 4 Priority Ranking groups (based on the Appendix 1 Priority Determination), as shown in Table 5.1.

The following pest species are currently declared pests in NSW under the relevant Pest Control Orders for each species:

- **wild rabbits**
- **wild dogs**
- **feral pigs**
- several species of locust (the Australian Plague, Spur-Throated and Migratory), though not considered relevant to Campbelltown LGA.

Under the Rural Lands Protection Act 1998 all land managers in NSW, whether on public or private land (including Council), have an obligation to control declared pest species on their land. As such, Council has a legislative responsibility to manage these three (3) pests on its land: **wild rabbits; wild dogs; feral pigs**.

Council recognises other common pest animal species as present within the Campbelltown LGA, however Council is not legally required to control or manage them, reflective of their non-legal status. They include: **feral cats, foxes and Indian Myna birds**.

For greater detail on control programs for both priority noxious weeds and pest animals, refer to the **Noxious Weed and Pest Animal Operational Plan 2009-2014**.

Priority Ranking	Description
Eradication of Weed	<p>Aim to <b>remove</b> the weed species from the geographic area being considered.</p> <ul style="list-style-type: none"> <li>• detailed surveillance and mapping to locate all infestations</li> <li>• destruction of all infestations including seed banks</li> <li>• prevention of entry to geographic area, and movement and sale within</li> <li>• must not grow and all cultivated plants to be removed</li> </ul> <p>monitor progress towards eradication</p>
Contain Spread of Weed	<p>Aim to significantly <b>reduce</b> the <b>extent</b> of the weed species in the geographic area being considered.</p> <ul style="list-style-type: none"> <li>• detailed surveillance and mapping to locate all infestations</li> <li>• control of all infestations, aiming for a significant reduction in weed density</li> </ul>

Priority Ranking	Description
	<ul style="list-style-type: none"> <li>prevention of entry to geographic area, and movement and sale within</li> <li>must not allow to spread from cultivated plants</li> </ul> monitor change in current distribution
Manage Weed, Pest Animal and Priority Sites	Aims to <b>reduce</b> the overall economic, environmental and/or social <b>impacts</b> of the species and to <b>maintain</b> the overall economic, environmental and/or social <b>value</b> of key sites/assets through targeted management. <ul style="list-style-type: none"> <li>research and develop Integrated Weed Management (IWM) packages for the species, including herbicides and biologic control where feasible</li> <li>promote IWM packages to landholders</li> <li>Monitor decrease in species impacts with improved management</li> <li>Identify key sites/assets in the geographic area and ensure adequate resourcing to manage the species/</li> </ul>
Limited Action	The weed/pest species would only be targeted for coordinated control in the LGA if its presence makes it likely to spread to land uses where it ranks as a higher priority, or in response to community complaints.

Table 5.1: Priority rankings.

The risk assessment has determined the priority weed species for management based on feasibility of eradication, containment and impact reduction.

Species	Direct Threat to: (key locations)	Action required	Budget
<b>Priority Ranking: Eradication</b>			
<b>Serrated Tussock</b>	Menangle Park (34'06"N, 150'45" E), Paceway and surrounding lands.	Ongoing inspections and maintenance control works, per the Serrated Tussock Management Agreement (dataworks #1356471).	Cost Centre 1229
<b>Salvinia</b>	Georges and Nepean Rivers and other waterbodies.	Ongoing inspections of monitoring sites  Active control management site: Simmos beach quarry dam	Cost Centre 1276
<b>Water Hyacinth</b>	All waterways within the Campbelltown LGA.	Ongoing inspections of monitoring sites: Varroville dam (corner St Andrews and St Johns Rd), Kennett Park	Cost Centre 1276
<b>Priority Ranking: Contain Spread</b>			
<b>Lantana</b>	Cumberland Plain	Seek funding to control	No Allocation

<b>Species</b>	<b>Direct Threat to: (key locations)</b>	<b>Action required</b>	<b>Budget</b>
	Woodland, Varroville Reserve, Smiths Creek, Mrs Macquarie's Lookout, Ingleburn freeway south bound.	key locations.	
<b>Castor Oil Plant</b>	Cumberland Plain Woodland	Seek funding to control scattered infestations throughout the LGA.	No Allocation
<b>Bridal Creeper</b>	Pembroke Park, Bunbury Curran Creek, Ingleburn Reserve.	Seek funding to control infestations.  Implement PoM for key locations.	No Allocation
<b>Ludwigia</b>	Smiths Creek, Spring Creek, Fishers Ghost Creek, McBarron Creek, Leumeah Creek, Georges River, parts of Bow Bowing and Bunbury Curran creek system.	Infestations of this weed have been reduced by control treatments over the last few years. Require ongoing maintenance and control works as required to prevent infestations from spreading and to further reduce infestation size/density.  Ongoing inspections and control works at key locations.  Ongoing inspections of monitoring sites: Marsden Park, Rose Park Minto.	Cost Centre 1276
<b>Balloon Vine</b>	Cumberland Plain Woodland. Milton Park, Bunbury Curran Park, Georges River, Pembroke Park.	Seek funding to control infestations and to implement Sydney Wide Vine and Scrambler Regional Plan.  Implement PoM for key locations.	No Allocation
<b>Manage Weed, Pest Species and Priority Sites</b>			
<b>African Olive</b>	Cumberland Plain Woodland Smiths Creek, Bunbury Curran	Site specific Weed Management Plans to be developed.	No Allocation



Species	Direct Threat to: (key locations)	Action required	Budget
	Park, Marsden Park,	<p>Implementation of the African Olive Regional Management Plan.</p> <p>For dense infestations (15 years +) ~\$10,000/hectare mechanical removal.</p> <p>For moderate and scattered infestations ~\$5,000/hectare manual drill and inject.</p> <p>CCC Bush Regeneration Contractor hourly rates.</p>	
<b>Morning Glory</b>	Pembroke Park, Bunbury Curran Park, Ingleburn Reserve,	Seek funding to control infestations and to implement Sydney Wide Vine and Scrambler Regional Plan.	No Allocation
<b>Blackberry</b>	<p>Pembroke Park, Bunbury Curran Park, Marsden Park,</p> <p>Strategic management along roadsides.</p> <p>Targeted control in Cumberland Plain Woodland.</p>	Seek funding.	No Allocation
<b>African Boxthorn</b> <i>Lycium ferocissimum</i>	<p>Scenic Hills Menangle/Appin, Bow Bowing, Varroville, Pembroke Park, Bunbury Curran Park, Marsden Park</p> <p>Cumberland Plain Woodland</p>	<p>Ongoing inspections, mapping, control and monitoring.</p> <p>Seek funding to control infestations and to implement Sydney Wide Trees and Shrub Regional Plan.</p>	<p>No Allocation</p> <p>For moderate and scattered infestations ~\$5,000/hect are manual drill and inject.</p> <p>CCC Bush Regeneration Contractor hourly rates.</p>

Species	Direct Threat to: (key locations)	Action required	Budget
			CCC Weed Spray Contractor hourly rates.
<b>Patterson Curse</b>	South west LGA including scattered infestations in Menangle Park, Campbelltown, Gilead, Eaglevale and Ingleburn.	Seek funding.	No Allocation
<b>Alligator Weed</b>	Active control Sites: Georges River (Simmos Beach to Glenfield), Nepean River, Bunbury Curran Creek, Macquarie Creek, Redfern Creek, Victoria Park (Minto), Bow Bowing Creek.	Infestations of this weed have been reduced over the last few years of treatment and require ongoing maintenance to keep them at current levels, and to further reduce infestation size/density.	Cost Centre 1276
<b>St Johns Wort</b> <i>Hypericum perforatum</i>	Menangle Appin  South west LGA	Seek funding.	No Allocation
<b>Privet</b>	Active Control Sites: Milton Park (Macquarie Fields), Ingleburn Reserve (Ingleburn), Wattle Reserve Smiths Creek (Ruse), Bunbury Curran Park, Botany Place (Kentlyn), Noorumba Reserve (Gilead), Spring Creek (St Helens Park)  Other Priority Sites: Pembroke Park, Redfern Creek (Ingleburn), Marsden Park.	Seek funding to control infestations and to implement Sydney Wide Trees and Shrub Regional Plan.	No Allocation
<b>Chilean Needle-Grass</b> <i>Nasella neesiana</i>	Varroville Reserve, Cumberland Plain Woodland	Seek funding.	No Allocation
<b>Limited Action</b>			

Species	Direct Threat to: (key locations)	Action required	Budget
Fireweed, Weeping Willow, Firethorn, Wandering Jew, Japanese Honeysuckle, Moth Vine, Prickly Pear, Mother of Millions, Madeira Vine, Pampas Grass.			

Table 5.2: Priority species for control within the Campbelltown LGA.

### High Priority Weed Species for Alert

Upon undertaking routine inspections, if these 'High Priority Weed Alert' (Table 5.2) species-as identified by the Sydney Weeds Committee-are identified within the Campbelltown LGA, Council's Weed Officer is to undertake the following actions:

- inspect other likely locations that may be infested by the weed,
- identify where possible the source of the infestations,
- map the infestations,
- report the infestation to both the Sydney Weeds Committee and Council,
- request funding resources from Council for its control if the weed is on Council land. Engage landholders if the infestation is on private land.

As these species are not yet established within the LGA, any management program should be carried out with the view to eradicating the species, thus preventing further invasion and hence a future cost to Council.

Category	Species	Action
Trees	Box Elder, Broad-leaved Pepper Tree, Chinese Celtis, Himalayan Ash, Yellow Bells, Tree of Heaven	Inspection-private and public lands. Mapping-GIS.
Herbs	Annual Ragweed, Perennial Ragweed, Blue Heliotrope, Broomrape, Glory Lily, Lacy Ragweed, Spiny Emex, New Zealand Christmas Bells, Tutsan	Control-Contractors or landholders. Enforcement-Noxious Weeds Act on private land.
Shrubs	Golden Rod, Groundsel Bush	Reporting (Council and Weeds Committee).
Aquatics	Senegal Tea Plant, Longleaf Willow Primrose, Eurasian watermillfoil, Dense Waterweed	Education-brochure dissemination.
Grasses	Mexican Feather-Grass, Lobed Needle-Grass	

Table 5.2: High Priority Weed Species that Council is 'On-Alert' for.

## 6. Budget (2008-09)

Table 6.1 summarises current funding sources for both noxious weeds and pest animals for the 2008-09 budget, being either from external agency grants or direct from Council. Please note that this funding is not guaranteed for each financial year, and has to be reapplied for each year. NSW Industry and Investment (who fund three crucial noxious weed control grants) are currently reviewing their investment in noxious weed control and will change the way that funding is allocated for this purpose. As such, there is a degree of uncertainty as to the availability of ongoing funding and Council's ability to implement weed control activities.

As a condition of these grants, Council commits to match each 'dollar for dollar'.

<b>Funding Source</b>	<b>\$ Allocation</b>	<b>Cost Centre</b>	<b>Management Plan/Grant</b>	<b>Species funded for covered</b>
NSW Department of Industry and Investment (via the South West Sydney Regional Weeds Committee)  Campbelltown City Council	<ul style="list-style-type: none"> <li>• \$21,000</li> <li>• \$21,000</li> </ul>	1276	<b>Aquatic Weed Aquatic Weed Management Plan for the South West Sydney and Sydney Central Regions</b>  <b>Aquatic Weeds Management Grant.</b>	Alligator Weed, Salvinia, Water Hyacinth, Senegal Tea (not present in LGA).
NSW Department of Industry and Investment (via the South West Sydney Regional Weeds Committee)  Campbelltown City Council	<ul style="list-style-type: none"> <li>• \$6,900</li> <li>• \$6,900</li> </ul>	1278	<b>Sydney-wide Regional Ludwigia Management Plan.</b>  <b>Ludwigia Management Grant.</b>	Ludwigia peruviana.
NSW Department of Industry and Investment  Campbelltown City Council	<ul style="list-style-type: none"> <li>• \$15,500</li> <li>• \$15,500</li> </ul>	1275	<b>Weed Control Coordination and Assistance Grant</b>	Funding coordination and assistance to implement Council's Private Property Inspection Program.
Campbelltown City Council for the next 4 years.	<ul style="list-style-type: none"> <li>• \$800 Budget allocation endorsed by Council, allocated as needed for up to 4 years.</li> </ul>	1229	Serrated Tussock Management Agreement (dataworks #1356471).	Serrated Tussock.
Campbelltown City Council	<ul style="list-style-type: none"> <li>• \$2,000</li> </ul>	1233	This Strategy	Pest animals, such as Indian Myna birds, rabbits, wild dogs, feral cats and foxes.

Table 6.1: 2008-09 Noxious weed and pest animal budget.

# 7. Appendix

## Appendix 1: Risk Assessment Priority Ratings (DII)

### DETERMINING PRIORITIES

The following matrix gives guidance on appropriate strategic weed management actions. Different weed species will appear in different positions on the matrix based on their risk and feasibility of coordinated control score.

WEED RISK	FEASIBILITY OF COORDINATED CONTROL				
	Negligible (113+)	Low (56-113)	Medium (31-55)	High (14-30)	Very high (<14)
Negligible (<13)	LIMITED ACTION	LIMITED ACTION	LIMITED ACTION	LIMITED ACTION	MONITOR
Low (13-38)	LIMITED ACTION	LIMITED ACTION	LIMITED ACTION	MONITOR	MONITOR PROTECT PRIORITY SITES
Medium (39-100)	MANAGE SITES	MANAGE SITES	MANAGE SITES	PROTECT PRIORITY SITES	CONTAIN SPREAD
High (101-192)	MANAGE WEED	MANAGE WEED	PROTECT PRIORITY SITES	CONTAIN SPREAD	DESTROY INFESTATIONS
Very high (192+)	MANAGE WEED	MANAGE WEED PROTECT PRIORITY SITES	CONTAIN SPREAD	DESTROY INFESTATIONS	ERADICATION

ALERT