

**Wollondilly  
Biosecurity (Weed Management) Strategy  
2020 – 2025**

**June 2020**

## **Document Review**

This strategy was first adopted by Wollondilly Shire Council on 18<sup>th</sup> April 2016.

Minor text alterations will be done internally by Council's Environmental Services Team as any relevant names, legislation, plans, policies and other strategies are changed.

Major alterations to the content of this document will go to Council's Executive for endorsement and as needed to the community for comment.

## **Update**

This strategy update has included:

- Incorporate reference to the repeal of the Noxious Weeds Act 1993 and its replacement with the Biosecurity Act 2015;
- Update the Community Strategic Plan strategies; and
- Incorporate reference to the latest version of the NSW Invasive Species Plan.
- Extend the strategy until the year 2025

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## Background

Weeds are invasive terrestrial and aquatic plants that are harmful to biodiversity, agricultural production and local industries such as tourism and recreation. Weed invasion has detrimental impacts on native plants, animals and their habitats, land productivity, livestock and human health through poisonous or irritating plants.

In the Greater Sydney region there are over 140 recorded species of weeds and many of these are found in Wollondilly Shire. Some of the weeds are widespread across Wollondilly and others occur in low distributions. The spreading of weeds is often caused by human activities. With the increasing pressure of population growth and housing development comes more demand for infrastructure corridors, clearing of native vegetation, soil disturbance, and nutrient rich stormwater runoff and associated impacts that encourage the establishment of weed growth in the landscape.

Wollondilly is rich in a variety of natural landscapes, native species and ecological communities mostly located within public open spaces and high conservation reserves including part of the Greater Blue Mountains World Heritage Area.

Wollondilly is located at the headwaters of three major river catchments (the Wollondilly, Nepean and Georges Rivers) as well as the Special Protection Area surrounding Lake Burragorang which is the main reservoir for Sydney's water supply. Over half of Wollondilly is either within a conservation reserve or sensitive water catchment land. In other parts of Wollondilly productive agricultural land provides locally grown food for the Sydney basin.

These natural areas, waterways and agricultural lands are some of Wollondilly's most precious and significant "assets". The guiding rationale behind this strategy is to prioritise and effectively control weeds for the purpose of protecting and enhancing these assets.

Wollondilly Council's role is to effectively manage weeds on public land and waterways, and assist the community with how to control weeds in areas of private ownership. Council also works in cooperation with neighbouring local councils and relevant government agencies to manage weeds along the boundaries of national parks reserves, water catchment lands, waterways and transport corridors.

This Weed Management Strategy articulates Wollondilly Council's approach to managing Priority Weeds and working with other landholders across all land tenures.

## Planning and Statutory Framework

Wollondilly Council operates within a hierarchy of statutes, plans and other strategic documents which guide its functions, responsibilities and obligations for managing land, waterways and protecting biodiversity. The most relevant in relation to weed management include:

### **'Create Wollondilly' Community Strategic Plan 2033**

The Community Strategic Plan (CSP) includes the community's 'Caring for the Environment' aspirations. This weed management strategy reflects the following CSP Outcomes and relevant Strategies.

Outcomes;

- An environment that is valued, preserved and protected, with new planning and development proposals supporting these values; and
- A community that is engaged with, and cares about, their environment.

Strategies;

- EN1 - Protect and enhance biodiversity, waterways and groundwaters Maintain and enhance the condition of biodiversity including the condition of water sources (both surface and groundwater);
- EN3 - Vegetation Management  
Achieve a balance between risk-based management and conserving biodiversity and maintaining public and private assets
- EN4 - Community Involvement  
Engage the community during the preparation and implementation of Council's environmental activities and programs
- EN5 - Environmental Awareness  
Enhance community awareness of the environmental values of Wollondilly's natural resources and rural lands and threats to these values
- EN7 - Agricultural Land and Capability  
Protect agricultural land and the natural resources which support agricultural capability
- EN8 – Auditing, Monitoring and Enforcement  
Undertake auditing, monitoring and regulatory enforcement and be responsive to community complaints to protect the environment and the health, safety and well-being of the community.

### **Wollondilly Biodiversity Strategy 2004**

This Weed Management Strategy compliments the Wollondilly Biodiversity Strategy which recognises weed control as one of the key components to preserving biodiversity. Wollondilly contains a wide variety of landscapes that provide habitat for a diverse range of native plants and animals. The landscape as a whole contributes to the ecological value and biodiversity of the region. This Weed Management Strategy will contribute towards achieving the broader conservation outcomes of the Wollondilly Biodiversity Strategy.

### **NSW Noxious Weeds Act 1993**

The Noxious Weeds Act 1993 has been repealed and replaced by the NSW Biosecurity Act 2015. As such there are no longer legally defined “Noxious Weeds”, however many of the weeds previously declared as noxious are now recognized as Priority Weeds in the new legislation and associated plans.

### **NSW Biosecurity Act 2015**

The *Biosecurity Act* streamlines 14 separate pieces of legislation into a single Act to manage biosecurity risks. The *Biosecurity Act* was assented to in September 2015 and came into effect in 2017 after a period of consultation and planning.

The Act prohibits some high-risk activities and materials. Part 3, Section 22, contains the ‘General Biosecurity Duty’ - a general obligation on people to be aware of their surroundings and take action to prevent the introduction and spread of pests, diseases, weeds and contaminants.

This Weed Management Strategy aligns with Council’s statutory role as Local Control Authority under the *Biosecurity Act 2015* to continue managing priority weeds on public land and waterways and work with landholders and other agencies, such as Local Land Services to manage weeds on private land. The responsibilities of a Local Control Authority under the *Biosecurity Act 2015* are similar to those which existed under the *Noxious Weeds Act 1993*.

### **NSW Biosecurity Strategy 2013-2021**

Biosecurity is the protection of our economy, environment and community from the negative impacts of pests, diseases, contaminants *and* weeds. The *Biosecurity Strategy* outlines how government, industry and community need to work together to identify, prevent, eradicate, minimise, respond to and manage biosecurity risks. This Weed Management Strategy promotes co-operation between Wollondilly Council, local industry and landholders to manage Priority Weeds across the landscape.

### **NSW Invasive Species Plan 2018-2021**

This Weed Management Strategy aligns with latter three goals of the *NSW Invasive Species Plan*:

*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 the commitment to manage invasive species.*

The plan encompasses all invasive plants including priority weeds and other environmental weeds. Often they are horticultural species that have escaped from cultivation and invaded natural bushland, wetlands and waterways. These invasive plants require management and monitoring by Council and the community to minimise their impacts on Wollondilly’s significant assets.

### **Ongoing regional weed management strategies and partnerships**

Priority and other environmental weeds are often spread by wind, water, birds, vehicles or machinery and do not stay within invisible local government boundaries. Many weeds that are a problem in Wollondilly are also a problem in neighbouring local government areas and conservation reserves. Addressing weed management issues at a broader regional level requires coordination and cooperative efforts from multiple government organisations, non-government organisations and environment groups, landholders, community and industry.

Wollondilly Council is an active member of the Sydney South West Regional Weeds Committee and the Sydney Weeds Network which comprise several government and non-government organisations that manage land and have a responsibility to control weeds. The purpose of the weeds network is to share technical expertise on best practice, participate in collaborative regional initiatives to concentrate weed control efforts and community education, and, contribute to the development and review of legislation and strategies to reduce the impact of weeds in NSW.

Wollondilly Council is a partner in the Sydney Region Weeds Action Program (WAP) 2020-2025 which is a regional project to eradicate regional high risk weeds, prevent the emergence of new weeds and build community awareness. Council was also a partner in WAP 2010-2015 and WAP 2015-2020. The Weeds Action Program is a NSW Government grant funding initiative to implement priority actions from the *NSW Invasive Species Plan*.

On a regular basis Wollondilly Council works cooperatively with neighbouring local councils (Camden, Campbelltown and Wingecarribee) and other government agencies to effectively manage weeds along land management boundaries: Water NSW, National Parks and Wildlife Service, Roads and Maritime Services, Australian Rail Track Corporation, Endeavour Energy, Rural Fire Service, Department of Primary Industries, Crown Lands and Greater Sydney Local Land Services.

Wollondilly Council also works in liaison with the Tharawal Aboriginal Land Council to strategically manage weeds on properties that are within environmental and culturally significant areas.

## Strategic approach and priorities

The aim of this strategy is to minimise the adverse effects of weeds using the available resources within Wollondilly Council, and to prioritise weed management efforts for optimum benefits to the community and environment. Council's approach to the appropriate management of Priority and environmental weeds is both:

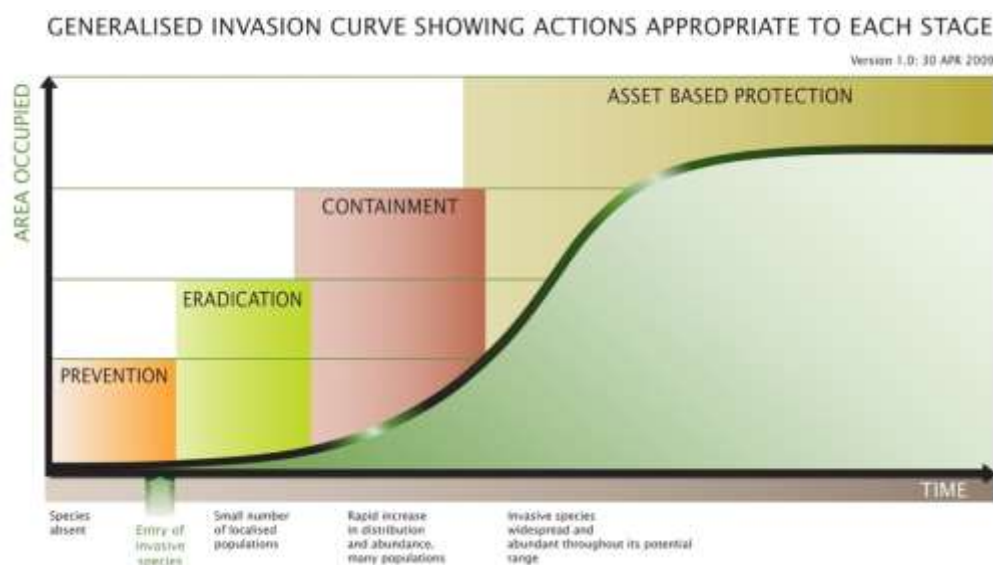
- Reactive; in responding to community enquiries and customer requests, and,
- Proactive; in planning ahead, working strategically to protect assets, working cooperatively at the regional level, preventing the spread of new weeds and responding to emerging weed problems.

Council works to maintain a balance between community expectations and the contribution to broader weed management priorities in the region and NSW.

Council's prioritisation of weed management is based on what is achievable and where the benefits of weed control will be greatest. This approach is best explained using the curve diagram (below) showing stages of weed invasion and their implications for effort and monetary investment over time.

Many weeds are already widely established in Wollondilly and complete eradication of all plants across a large area is not achievable with the existing control methods and available resources. Therefore on ground control and community education about these weeds is concentrated in strategic locations to protect important environmental and agricultural assets ie. "Asset based protection". Some level of weed infestation for these species needs to be tolerated and control is necessary when there will be a high environmental, economic or health impact.

At the other end of the spectrum are new and emerging weeds. Once these weeds get into a new area they often have the ability to establish rapidly. Successful weed control of all plants requires a rapid response after their moment of entry into the landscape ie. "Eradication" and "Containment". The costs associated with eradication and containment while weed distribution is low are typically less than the cost of widespread weed control.



Acknowledgement: Agriculture Victoria <http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/protecting-victoria-from-pest-animals-and-weeds>



Using current knowledge about weed behaviour and the stages of invasion, Wollondilly Council has set the following priorities for weed management:

### **1. Eradicate and prevent the spread of new weeds**

New weeds are terrestrial or aquatic weeds that have been detected in Wollondilly for the first time, often referred to as “new incursions”. Even the best prevention efforts will not stop the arrival of weed seeds and vegetative material, which can be easily, spread by wind, water, machinery, a person’s boots etc.

Once a new weed has been detected, it is correctly identified and assessed for its level of risk to the environment, economy and human health. Individual plants and populations are controlled immediately while they are still in small numbers and localised. Depending on the weed species, control efforts can have immediate success or can take time and regular follow up of regrowth until the plant is completely eradicated.

An example of a new incursion in Wollondilly is Long Leaf Water Primrose (*Ludwigia longifolia*), an aquatic weed found in a rural property dam. Wollondilly Council is working with the private landholder to eradicate this weed. If left untreated it has the potential to spread into the local creek and downstream towards Burragorang State Conservation Area and Warragamba Dam.

### **2. Eradicate or contain weeds with limited distribution**

Some weeds occur in isolated and scattered populations throughout Wollondilly. Eradication or containment is achievable to prevent the weed from spreading further into bushland, waterways or agricultural land. These weeds are known to have detrimental impacts and therefore have a high priority for control on public and private land. They also include some priority weeds that occur in low numbers within Wollondilly and are identified as a high risk in NSW.

The distribution of these weeds is recorded and weed control sites are prioritised based on available resources and the protection of assets. Weed control programs include frequent and regular follow up of regrowth until the weed is eradicated or sufficiently contained.

An example of a weed with limited distribution in the parts of Wollondilly is African Olive. This weed has heavily infested central parts of the shire such as Razorback and Mount Hunter, however other areas such as Appin, Pheasants Nest, Oakdale and Buxton have very low numbers of these weeds. Council has established a “containment line” and is undertaking Mapping and control of this weed outside of the containment line to prevent it taking over these areas. This involves mapping and controlling African Olive on Council land and working with other landholders to advise them on effective control for their land.

### **3. Reduce the impacts of widespread weeds**

Widespread weeds occur in large populations across all landscapes in Wollondilly. Effective control relies on high levels of funding over many of years and extensive cooperation between public and private land managers. In reality what is achievable is to reduce the further spread and harmful impacts on significant assets such as: bushland and conservation reserves; endangered ecological communities; threatened species; habitat corridors and linkages across public and private land; native vegetation in road reserves; rivers and creeks; riparian zones; water catchment land; catchment headwaters; and productive agricultural land. Other issues can also determine weed control priorities such as controlling aquatic weeds in waterways for public safety and access, and controlling large woody weeds along roadsides to maintain visibility.

Widespread weed control is prioritised based on the available resources in Council and where concentrated efforts can have most benefit in protecting significant assets and the health of humans and animals.

Examples of strategic programs in Wollondilly to reduce the impacts of widespread weeds on significant assets are: Box Elder (*Acer negundo*) and Honey Locust (*Gleditsia triacanthos*) control along the Upper Nepean River riparian zone; Lantana (*Lantana camara*) control along Silverdale Road adjacent to water catchment and national park lands; and the Alligator Weed (*Alternanthera philoxeroides*) suppression and community education program for the Nepean River and tributaries.

#### **4. Landscape surveillance and private property inspections**

Weeds will always have the potential to show up and spread across the landscape in all land uses and all land tenures. Surveillance of key sites and a private property inspection program enables Wollondilly Council to detect new weeds, monitor weed spread around significant assets and work directly with the community.

The surveillance also includes checking for Priority Weeds, regional and NSW weed alerts, and known high risk plants (including hybrids) being grown, sold and distributed.

The rate of property and site inspections each year depends on the available resources within Council and external grant funding. Incidental checks for weeds are often done when a Council officer is already at a site or property for other issues such as tree inspections, bushfire management and development approvals. Wollondilly Council's preferred approach is to build capacity, relationships and cooperation with private landholders and industry. Legal enforcement of weed control is used as the last resort.

Private property inspections provide an opportunity to inform landowners of their legal and environmental responsibilities to control weeds. Landowners are given technical information and taught basic skills for controlling weeds. Large rural landholders are mentored to deal with more complex weed management and land management issues on their properties.

High risk pathways and sites that are heavily trafficked (ie. main roads and rail corridors, major waterways, tourism and recreational areas) are checked for new incursions and weed spread that will impact on nearby significant assets.

Other high risk sites are checked for weed spread and the sale of invasive plants that have potential to become weeds in the landscape (this is part of the "Prevention" stage in the weed invasion curve diagram). These sites include: dams; boat launch areas; rural community event venues and livestock holding areas; nursery and garden landscape suppliers; aquariums and pet stores; florists, retail homemaker centres; waste disposal sites; goods and machinery depots; fresh produce markets; and development sites.

An example of landscape surveillance in Wollondilly is checking weed infestations in the Southern railway line which traverses areas of high ecological significance. Weeds typically grow and spread in rail corridors due to vehicle movement, use of machinery and regular soil

disturbance. Regular checks of the rail corridor by looking through the fence, from the train and permitted access into the corridor enables Council to work cooperatively with the Australian Rail Track Corporation to control the highest risk weeds before they spread into the adjacent bushland.

#### **5. Assist the Wollondilly community to control weeds**

Effective weed management relies on the combined effort of land managers and community support to address weed problems on private as well as public land. Wollondilly Council encourages the community to appreciate, care for and protect the natural environment which includes controlling weeds on private properties in accordance with their General Biosecurity Duty.

Council is committed to supporting landowners and occupiers who are motivated and active in managing priority weeds in cooperation with Council and their neighbours. In addition to property inspection programs and landholder mentoring, Council encourages participation in Bushcare and Landcare volunteer activities as opportunities to learn weed management skills and contribute to the restoration of natural areas. Council also runs a program of “Sustainadilly” courses for residents focused on environmental and sustainability skills, including weed management.

The Biosecurity Act 2015 provides several compliance avenues to require landholders to control Priority Weeds if they do not undertake the required weed control voluntarily. These include issuing enforceable Biosecurity Directions, undertaking works and charging back to the landowner and issuing fines.

#### **6. Build capacity of council staff to control weeds and support the community**

Effective weed management and community engagement relies on the capability of Wollondilly Council’s workforce and contractors.

Council supports professional development and educational opportunities that will enable staff to provide high quality services and programs for Wollondilly’s residents.

Information about weeds is distributed across all relevant Council operations to assist with identification and prevention of weed spread when working on site and making decisions about planning and development approvals.

## Management Actions

Specific management actions are outlined in the following tables. The implementation of these actions is prioritised according to the availability of Wollondilly Council's resources and external funding.

### 1. Eradicate and prevent the spread of new weeds

Council's approach	Critical Actions	Performance Indicators
Rapid response when new a weed incursion is detected	<ul style="list-style-type: none"> <li>Follow the procedures outlined in the <i>Greater Sydney Region Weed Incursion Plan</i> and <i>Greater Sydney Region Rapid Response Plan</i>.</li> </ul>	New weed incursions are controlled and contained immediately
Mapping	<ul style="list-style-type: none"> <li>Record distribution and density of new incursion site/s.</li> <li>Record locations of any new infestations and plants found at other sites.</li> </ul>	Site/s and extent of new incursions are recorded on GIS
Education	<ul style="list-style-type: none"> <li>Distribute information to other council staff, contractors, volunteers and community members that encourages them to look out for and report other infestations.</li> <li>Notify neighbouring landholders, councils, government agencies and local media when there is risk of further weed spread.</li> </ul>	Information is distributed through other Council operations, the community and shared with other relevant land managers in the region
Source funding	<ul style="list-style-type: none"> <li>Seek available internal funds.</li> <li>Seek cost sharing arrangements with other landholders.</li> <li>Seek emergency grant funds and regional grant applications.</li> </ul>	Funds are acquired for immediate weed control
On ground weed control and prevent spread	<ul style="list-style-type: none"> <li>Seek landholder cooperation if the site is not on council land and waterways.</li> <li>Implement an immediate eradication program using best practice weed control methods.</li> <li>Implement weed spread prevention and hygiene protocols.</li> </ul>	<p>Area (ha) of targeted weed control Length (km) of targeted weed control</p> <p>Technical information about weed spread prevention is distributed to landholders.</p>
Monitoring and follow up	<ul style="list-style-type: none"> <li>Monitor site regularly and treat all regrowth until eradication is achieved.</li> </ul>	Evidence showing success of eradication program (photos, maps)
Update records	<ul style="list-style-type: none"> <li>Annually record distribution and density of new incursion site/s during the eradication program.</li> <li>Maintain records of all treated locations after eradication is achieved.</li> </ul>	<p>New incursion records are updated annually</p> <p>Historical records are kept on file once the weed is eradicated</p>

### Specific actions for recorded infestations of new weeds

Common Name	Botanical Name	Previous Status in Wollondilly	Current Status in Wollondilly	Weed control objective in Wollondilly	Critical Actions	Recorded localised infestations
Angels Trumpet	<i>Maurandya barclayana</i>	Environmental Weed	Priority New Incursion	Eradication	<ul style="list-style-type: none"> <li>Inspect sites annually in Spring and treat all regrowth.</li> <li>Continue eradication program using a range of control techniques including foliar sprays with various herbicides, manual removal, scrape and paint.</li> </ul>	Council land in Glenrock Reserve (end of Hill Street, Picton), and, Former Picton landfill on Wonga Road.
Kei Apple	<i>Dovyalis caffra</i>	Environmental Weed	Regional Priority weed - Eradication	Eradication	<ul style="list-style-type: none"> <li>Inspect site annually and treat all regrowth on the roadside.</li> <li>Continue eradication program using basal bark spraying.</li> <li>Continue to work with with landholder to gain property access and authorisation for weed control work.</li> <li>Assist landholder with technical advice about control and preventing spread.</li> <li>Assess if the weed is growing in surrounding properties.</li> </ul>	<p>Rural private property on corner of Bobs Range Road and Werombi Road, Werombi.</p> <p>Extent of the weed distribution is determined.</p>
Kudzu	<i>Pueraria lobata</i>	Class 3 Noxious Regionally Controlled	Regional Priority weed - Eradication	Eradication	<ul style="list-style-type: none"> <li>This weed has not been detected on site for 5 years and appears to be eradicated.</li> <li>Continue monitoring annually for duration of strategy to ensure no new growth.</li> <li>Identify and control any new infestations at other sites.</li> </ul>	Rural property in Jumbunna Place, Buxton.

Long Leaf Water Primrose	<i>Ludwigia longifolia</i>	Class 3 Noxious Regionally Controlled	Priority New Incursion	Eradication	<ul style="list-style-type: none"> <li>• Inspect sites four times per annum to monitor and treat all new plants detected in three adjacent rural dams.</li> <li>• Continue eradication program using spraying and hand removal removal of fruit.</li> <li>• Check downstream for weed spread.</li> <li>• Immediately notify Water NSW and National Parks and Wildlife Service if infestations are found downstream of Monkey Creek to prevent spread into Warragamba Dam and Burragorang State Conservation Area.</li> <li>• Continue to work with the landholders to gain access and authorisation for weed control work.</li> <li>• Assist landholders with technical advice about weed control and preventing spread.</li> </ul>	Two private properties on corner of Silverdale Road and Popes Lane, Werombi.
Peruvian Water Primrose	<i>Ludwigia peruviana</i>	Class 2 Noxious Regionally Prohibited	Priority New Incursion	Eradication	<ul style="list-style-type: none"> <li>• All mature plants removed, only small seedlings remain</li> <li>• Inspect site 5 times per annum to monitor and treat all new plants detected in the basins and downstream channel before they flower</li> <li>• Continue eradication program using hand removal and foliar spraying methods</li> <li>• Continue to check for weed spread in downstream waterways.</li> </ul>	Council managed stormwater basins and channel in Cubbitch Barta Reserve, Camden Park.

## 2. Eradicate or contain weeds with limited distribution

Council's approach	Critical Actions	Performance Indicators
Identify priority sites	<ul style="list-style-type: none"> <li>Identify priority sites where isolated and scattered infestations can be eradicated to protect significant assets.</li> <li>Identify priority sites where large infestations can be contained to protect significant assets.</li> </ul>	Priority sites for weed control are identified
Mapping	<ul style="list-style-type: none"> <li>Record distribution and density of priority sites.</li> </ul>	Locations and extent of priority sites are recorded
Education	<ul style="list-style-type: none"> <li>Distribute information to other council staff, contractors, volunteers and community members that encourages them to look out for and report other sightings/infestations.</li> </ul>	Information is distributed through other Council operations and the community
Source funding	<ul style="list-style-type: none"> <li>Seek available internal funds.</li> <li>Seek cost sharing arrangements and cooperation with other government agencies, councils and landholders.</li> <li>Seek regional grant applications.</li> </ul>	Funds are acquired for weed control
On ground weed control and prevent spread	<ul style="list-style-type: none"> <li>Work with neighbouring landholders, councils and government agencies to eradicate or contain weed spread.</li> <li>Implement weed control using best practice methods.</li> <li>Implement weed spread prevention and hygiene protocols.</li> </ul>	<p>Area (ha) of targeted weed control</p> <p>Length (km) of targeted weed control</p> <p>Technical information provided to landholders to prevent further spread</p>
Monitoring and follow up	<ul style="list-style-type: none"> <li>Monitor sites regularly and treat all regrowth until eradication or containment is achieved.</li> </ul>	<p>Reduced distribution of the weed</p> <p>Evidence showing success of eradication or containment program (photos, mapping)</p>
Update records	<ul style="list-style-type: none"> <li>Every 2 years record distribution and density of priority sites to monitor success of weed control programs.</li> </ul>	Council records are updated to show progress of weed eradication/containment programs

### Specific actions for weeds with limited distribution

Common Name	Botanical Name	Past Status in Wollondilly	Current Status in Wollondilly	Weed control objective	Critical Actions	Priority locations
African Olive	<i>Olea europaea</i> subsp. <i>cuspidata</i>	Class 4 Noxious Locally Controlled	Regional Priority Weed - Containment	Reduce extent outside of core areas to protect assets  Weed spread containment to protect assets  Control along large roads for visibility and safety	<ul style="list-style-type: none"> <li>Reduce number and distribution of mature and immature olives outside of the core infestation and containment lines, working in cooperation with landholders, neighbouring councils and other government agencies.</li> <li>Educate and support rural landholders to strategically reduce number and distribution of olives on private properties.</li> <li>Promote use of best practice control methods such as basal bark spraying, regrowth spraying and trittering dead woody material.</li> <li>Work in cooperation with Roads and Maritime Services and Greater Sydney Local Land Services to prioritise and work at treatment sites within core areas to protect bushland assets and maintain visibility on roadsides.</li> </ul>	East of the Southern Freeway
Boneseed	<i>Chrysanthemoides monilifera</i> subspecies <i>monilifera</i>	Class 1 Noxious State Prohibited	State Priority weed - Eradication	Eradication as part of the Sydney-wide Boneseed eradication program	<ul style="list-style-type: none"> <li>Inspect all known sites annually before the seeding period in late Winter.</li> <li>Immediately remove all single trees and small plants when found.</li> <li>Continue eradication program and treat all regrowth of adult plants using the cut and paint method.</li> <li>Hand pull all seedlings.</li> <li>Use limited foliar spraying where plants are not surrounded by native vegetation.</li> <li>Record locations of all new infestations</li> </ul>	Recorded scattered sites throughout Wollondilly Shire



					<p>and single plants found and add to database of mapped sites recorded since 2009.</p> <ul style="list-style-type: none"> <li>• Work in cooperation with with Australian Rail Track Corporation to effectively treat and monitor a minor infestation in the rail corridor approximately 300 metres on either side of the Wellers Road bridge over the main Southern railway line at Bargo.</li> <li>• Work with ARTC staff to gain safe access into the rail corridor to monitor infestations.</li> </ul>	Southern railway line at Bargo
Cat's Claw Creeper	<i>Dolichandra unguis-cati</i>	Class 4 Noxious Locally Controlled	State and Regional Priority Weed – Asset Protection	Eradication of isolated infestations to protect assets	<ul style="list-style-type: none"> <li>• Continue eradication program and treat all regrowth at two known sites where infestations are spreading.</li> <li>• Monitor infestations and follow up treatment if the weed continues to spread.</li> </ul>	Mt Hunter Rivulet and the Nepean River (Brownlow Hill)
Climbing Asparagus	<i>Asparagus plumosus</i>	Class 2 Noxious Regionally Prohibited	State Priority Weed – Asset Protection	Eradication of isolated infestations to protect assets	<ul style="list-style-type: none"> <li>• Continue eradication program at sites of small slow growing infestations using foliar spray method.</li> <li>• When doing weed control in nearby areas, opportunistically monitor the infestations and treat regrowth.</li> </ul>	Approximately 12 small scattered sites across Wollondilly Shire

Gorse	<i>Ulex europaeus</i>	Class 3 Noxious Regionally Controlled	State Priority Weed – Asset Protection  Regional Priority Weed - Containment	Eradication of only known infestation in Wollondilly	<ul style="list-style-type: none"> <li>• Monitor annually a small infestation along 500 metres of rail corridor on both sides of Remembrance Drive Bridge and in two adjacent properties owned by Council and a private landholder.</li> <li>• Continue to work with landholders to eradicate a small infestation at Darkes Forest.</li> <li>• Continue eradication program using foliar and basal bark spraying methods.</li> <li>• Follow up treatment of regrowth.</li> <li>• Work in cooperation with with Australian Rail Track Corporation to to ensure effective treatment within the rail corridor.</li> <li>• Work with ARTC staff to gain safe access into the rail corridor to monitor infestations.</li> <li>• Work with private property owners to gain access as required.</li> </ul>	Southern rail line and neighbouring properties at Tahmoor  Approximately 5 private properties at Darkes Forest  One property on Quarry road The Oaks
Green Cestrum	<i>Cestrum parqui</i>	Class 3 Noxious Regionally Controlled	Regional Priority Weed - Asset Protection	Eradication of isolated infestations to protect assets	<ul style="list-style-type: none"> <li>• Strategically control the two main infestations using basal bark spraying and scrape/paint methods.</li> <li>• Educate rural landholders about the harmful impacts to cattle and build skills in identification, reporting and how to destroy plants and roots.</li> <li>• Eradicate isolated infestations (including creeks and waterways) to prevent spread into rural areas of Oakdale, Mt Hunter, Tahmoor, Werombi and Picton.</li> </ul>	Areas bordering catchment land including rural properties that manage livestock and horses
Italian buckthorn	<i>Rhamnus alaternus</i>	Environmental Weed	Weed of Regional Concern	Eradication of isolated infestations to protect assets	<ul style="list-style-type: none"> <li>• Mentor private property owners to eradicate isolated infestations along roadsides.</li> <li>• Continue to monitor and treat any new isolated infestations on council land using basal bark spraying.</li> </ul>	Isolated infestations at The Oaks and around Razorback

Pampas Grass	<i>Cortaderia selloana</i>	Class 3 Noxious Regionally Controlled	Regional Priority Weed – Asset Protection Local Priority Weed - Eradication	Eradication of isolated infestations to protect assets	<ul style="list-style-type: none"> <li>Control isolated infestations to prevent spread in the Georges River headwaters.</li> <li>Build capacity of scout guides and volunteers to do follow up weed control.</li> <li>Search and control any other isolated infestations throughout Wollondilly.</li> </ul>	Crown Land in Cataract Scout Park, Appin  Other sites found in Wollondilly
Salvinia	<i>Salvinia molesta</i>	Class 3 Noxious Regionally controlled	State Priority Weed – Asset Protection  Regional Priority Weed - Containment	Eradication	<ul style="list-style-type: none"> <li>Monitor previous sites and follow up treatment as required.</li> <li>Eradicate all new infestations found.</li> </ul>	Previous sites: private land in Wilton (pond) and private land in Werombi (dam)
Sagittaria	<i>Sagittaria platyphylla</i>	Class 4 Locally Controlled Weed	State Priority Weed – Asset Protection	Monitoring and trial new weed control methods	<ul style="list-style-type: none"> <li>Continue to monitor the one known infestation which remains static.</li> <li>Trail new weed control methods as they become available.</li> </ul>	Redbank Creek
Serrated Tussock	<i>Nassella trichotoma</i>	Class 3 Noxious Regionally controlled	State Priority Weed – Asset Protection  Regional Priority Weed - Containment	Prevent northward spread to protect assets	<ul style="list-style-type: none"> <li>Continue landscape surveillance to identify high priority locations where continued spread threatens agricultural assets.</li> <li>Mentor rural landholders in plant identification, control methods and hygiene practices to prevent further spread.</li> <li>Check in regularly with the landholders to ensure consistent follow up work is done.</li> <li>Work in cooperation with Australian Rail Track Corporation and Roads and Maritime Services to encourage control within their corridors and to reduce</li> </ul>	Rural properties and major transport corridors across Wollondilly Shire

					northward spread.	
Water Hyacinth	<i>Eichhornia crassipes</i>	Class 3 Noxious Regionally Controlled	Regional Priority Weed - Containment	Eradication	<ul style="list-style-type: none"> <li>• Continue eradication program.</li> <li>• Monitor and follow up treatment annually.</li> </ul>	Private property dams at Yanderra and Silverdale

### 3. Reduce the impacts of widespread weeds

Council's approach	Critical Actions	Performance Indicators
Identify priority areas for strategic control of widespread weeds to protect most significant environmental and agricultural assets	<ul style="list-style-type: none"> <li>Identify priority areas for weed control - core infestations, isolated outlying infestations, linear pathways, containment lines and buffer zones.</li> </ul>	Priority areas for widespread weed control are identified
Source funding	<ul style="list-style-type: none"> <li>Seek available internal funds.</li> <li>Seek external grant funds and sponsorship.</li> <li>Seek cost and resource sharing arrangements with other landholders, councils and gov't agencies.</li> </ul>	Funds acquired for weed control  Cost sharing and resource sharing arrangements are in place
Terrestrial weed control	<ul style="list-style-type: none"> <li>Targeted strategic control of priority widespread weeds</li> <li>Start from isolated patches and work towards dense infestations</li> <li>Use best practice weed control methods</li> <li>Implement bush regeneration programs in areas of high resilience</li> <li>Revegetate recovering sites with indigenous native species (when appropriate)</li> </ul>	Area (hectares) of targeted weed control Length (km) of targeted weed control  Area (hectares) of bush regeneration  Success of widespread weed control programs
Aquatic weed control	<ul style="list-style-type: none"> <li>Targeted strategic control of selected widespread weeds</li> <li>Chemical treatments and manual harvesting to suppress weeds and contain spread.</li> <li>Co-ordinate timing of works with other property owners and land managers.</li> </ul>	Area (hectares) of targeted weed control Length (km) of targeted weed control  Success of widespread weed control program Cooperative arrangements with other land managers
Integrated weed management	<ul style="list-style-type: none"> <li>Utilise bushfire management and post burn land management programs to control widespread weeds.</li> <li>Incorporate weed control into broader ecological approaches that integrate management of multiple invasive threats and practices to protect biodiversity eg. feral animal control, revegetation etc</li> </ul>	Success of integrated land management programs
Biological control	<ul style="list-style-type: none"> <li>Trial use of biocontrols as long term weed control solutions (when available).</li> </ul>	Success of biocontrol programs

### Main widespread weeds of concern

Common Name	Botanical Name	Past Status in Wollondilly (Noxious Weeds Act)	Current Status in Wollondilly
African Olive (Note: widespread distribution west of the Southern Freeway and east of Silverdale Road)	<i>Olea europaea</i> subsp. <i>cuspidata</i>	Class 4 Noxious Locally Controlled	Regional Priority Weed - Containment
African Daisy	<i>Osteospermum</i> species	Environmental weed	Environmental Weed
Alligator Weed	<i>Alternanthera philoxeroides</i>	Class 3 Noxious Regionally Controlled	State and Regional priority Weed - Containment
Blackberry	<i>Rubus fruticosus</i> species aggregate	Class 4 Noxious Locally Controlled	State Priority Weed – Asset protection
Box Elder	<i>Acer negundo</i>	Environmental weed	Weed of Regional Concern
Camphor Laurel	<i>Cinnamomum camphora</i>	Environmental weed	Weed of Regional Concern
Coolatai Grass	<i>Hyparrhenia hirta</i>	Class 4 Locally Controlled	Weed of Regional Concern
Cotoneaster	<i>Cotoneaster glaucophyllus</i>	Environmental weed	Environmental Weed
Fireweed	<i>Senecio madagascariensis</i>	Class 4 Noxious Locally Controlled	State Priority weed – Asset Protection
Honey Locust	<i>Gleditsia triacanthos</i>	Class 4 Noxious Locally Controlled	Weed of Regional Concern
Japanese Honeysuckle	<i>Lonicera japonica</i>	Environmental weed	Weed of Regional Concern
Lantana	<i>Lantana camara</i>	Environmental weed	State priority Weed – Asset Protection
Madeira Vine	<i>Anredera cordifolia</i>	Class 3 Noxious Regionally Controlled	State Priority Weed – Asset Protection
Privet - broad leaf	<i>Ligustrum lucidum</i>	Environmental weed	Weed of Regional Concern
Privet - narrow leaf	<i>Ligustrum sinense</i>	Environmental weed	Weed of Regional Concern
St Johns Wort	<i>Hypericum perforatum</i>	Class 4 Noxious Locally Controlled	Weed of Regional Concern
Willows	<i>Salix</i> species exc <i>Salix babylonica</i>	Class 4 Locally Controlled	State Priority Weed – Asset Protection Regional Priority Weed – Eradication ( <i>Salix nigra</i> only)

#### 4. Landscape surveillance and private property inspections

Council's approach	Critical Actions	Performance Indicators
Non-regulatory inspections of private properties to detect weeds. Educate, mentor and teach skills to landholders.	Consistent with the <i>Greater Sydney Region Inspection Plan</i> and the <i>Greater Sydney Region High Risk Pathway and Site Management Plan</i>	200 inspections per annum
	Private property inspections and landholder education – property size under 2 hectares	20 inspections per annum
Non-regulatory inspections of high priority sites to check for new incursions and monitor weed spread. Educate land managers and business operators.	High value conservation reserves / endangered ecological communities	12 inspections per annum
	Large agricultural properties	1 inspection per annum
	Tourism / recreational areas	5 inspections per annum
	Periphery around high risk sites	5 inspections per annum
Surveillance and checks of high risk pathways to monitor spread of priority weeds along roads and rail corridors.	Southern Freeway (main road)	80 kms checked per annum
	Main Southern railway line	80 kms checked per annum
	Rural roads throughout the Shire	400 kms checked per annum
Surveillance and checks for spread of priority weeds in waterways.	Nepean River and tributaries	64 kms checked per annum
Non-regulatory inspections of other high risk sites to check for new incursions and weed spread. Educate land managers/property managers/stallholders/business operators.	Public dams	9 inspections per annum
	Boat ramps / boat launch areas	4 inspections per annum
	Showground / event venues	2 inspections per annum
	Nursery, garden and landscape supplier	3 inspections per annum
	Backyard nursery	1 inspection per annum
	Aquarium	1 inspection per annum
	Pet store	1 inspection per annum
	Retail homemaker centre and large hardware	1 inspection per annum
	Tip / waste disposal site	3 inspections per annum
	Council depot	2 inspections per annum
	Development site	10 inspections per annum
	Stock and produce outlet	2 inspections per annum
	Fresh produce market / other market	2 inspections per annum
Other – as required	4 inspections per annum	

## 5. Assist the community to control weeds

Council's approach	Critical Actions	Performance Indicators
Resident enquiries	<ul style="list-style-type: none"> <li>Promptly respond to customer enquiries about weeds.</li> </ul>	Customer requests regarding weeds are responded to within 14 working days
Resident education and raising awareness	<ul style="list-style-type: none"> <li>Distribute publications and educational material via community events, information stalls and the council foyer.</li> <li>Circulate information through local newspapers and radio. Refer to the <i>Greater Sydney Region Communication Strategy</i> as a guide for engaging external stakeholders and media publicity regarding weed management issues.</li> <li>Distribute new weed alerts through council newsletters, website and social media.</li> <li>Promote good news and success stories about how Council and the community are successfully controlling weeds.</li> <li>Design educational material and programs to also engage people from culturally and linguistically diverse communities.</li> </ul>	<p>Number of awareness raising events and information stalls</p> <p>Number of residents engaged</p> <p>Number of media articles and stories published</p> <p>Feedback and interest received as a result of media articles and stories</p>
Assist landholders with weed control methods and hygiene practices to prevent weed spread	<ul style="list-style-type: none"> <li>Mentor and teach skills to assist landholders with weed control on private property.</li> <li>Hold rural landholder information days, field days, seminars and site tours that assist landholders to build knowledge and technical skills.</li> </ul>	<p>Number of landholders assisted/mentored</p> <p>Number of educational events held</p>
Environmental volunteering and school programs	<ul style="list-style-type: none"> <li>Continue to support environmental volunteering and community participation in Bushcare, Landcare, Wollondilly Community Nursery and Environment Resource Centre, youth training programs (eg Green Army) and corporate work days.</li> <li>Work with local environment groups to share knowledge and distribute information through community networks.</li> <li>Work with scout groups and schools to engage children in environmental education programs that promote the values of natural areas.</li> </ul>	<p>Number of volunteers engaged</p> <p>Number of school students engaged</p> <p>Number of environment/ community groups involved</p>



## 6. Build capacity of Council staff to control weeds and assist the community

Council's approach	Critical Actions	Performance Indicators
Build knowledge of Council staff and contractors	<ul style="list-style-type: none"> <li>• Support professional development and peer sharing opportunities for Council staff to build knowledge in best practice weed management e.g. weed identification, control techniques, high volume spraying, understanding new weeds, using herbicides in accordance with guidelines, industry standards and product labels.</li> <li>• Build staff capacity across all relevant Council operations responsible for land management and planning – outdoor operations, parks and gardens, construction, stormwater, development assessment etc</li> <li>• Distribute information about emerging weeds, new weed alerts and weed seed spread hygiene to Council staff and contractors working outdoors.</li> </ul>	<p>Number of staff participating in training opportunities</p> <p>Relevant information distributed to staff and contractors</p> <p>Positive feedback from the community about weed management practices and progress</p>
Development assessment	<ul style="list-style-type: none"> <li>• Continue to promote development consent conditions for weed control and landscaping plans that use non-invasive plants.</li> <li>• Promote the inclusion of “prohibited species” lists in Council’s development control planning documents (as required).</li> </ul>	Development consent conditions routinely require weed control and landscaping with non-invasive plants
Regional collaboration	<ul style="list-style-type: none"> <li>• Participate on the Sydney South West Regional Weeds Committee to exchange technical information and stay up to date with regional weed management priorities, new weeds and changes in government legislation.</li> <li>• Participate in regional initiatives, grants and projects that are mutually beneficial for Wollondilly and neighbouring government land managers - national parks, roads, rail corridors, catchment lands and Crown lands.</li> </ul>	<p>3 regional weeds committee meetings attended by Wollondilly staff per annum</p> <p>Number of working partnerships with other public land managers</p> <p>Evidence showing success of working partnerships with other public land managers</p>