



**Weed Management Strategy**  
2019–29



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# 1. Executive summary

Weeds are nationally a significant problem. Weeds pose one of the biggest threats to the natural environment and change the balance of Australia's ecological biodiversity by displacing native plant and animal species. The costs of weed impacts are borne by all of us. Controlling weeds is everyone's responsibility. Under the *Local Government Act 1989*, Council has an important legislative role to play in planning, coordinating and monitoring weed control actions in a manner inclusive of community and other land managers.

The high priority actions from Council's *Pest Plant Management Strategy 2012–17* Action Plan were largely completed. This included on-ground works through collaborative projects, community incentive programs, annual weed programs on priority Council bushland and roadside reserves, and weed advocacy.

The primary focus of this strategy is goal setting for collaborative action on weed control across Cardinia Shire and action planning for the next 10 years. The strategy sits under the *Sustainable Environment Policy 2018–28*, and aligns directly to the objectives of Council's *Biodiversity Conservation Strategy 2019–2029*.

Progress of the actions in this strategy will be reviewed in 2024. A more detailed review of the entire strategy including progress towards the objectives outlined under each of the goals will take place after its conclusion in 2029.

Council's vision is that Council, agencies and the community work collaboratively to protect Cardinia Shire's landscape, biodiversity and agriculture from the negative impacts of weeds.

To achieve this vision, this plan is framed around three themes which will guide the goals, objectives and action plan. The themes are protect, manage and engage.

These focus on both preventing new weeds arising, while strategically allocating resources to those that already exist. The themes also recognise the need to work in a collaborative manner with parties within and outside the shire and the significant role the community plays in managing weeds in the landscape.

This strategy provides the context for the importance of weed management, the vision, goals and objectives, relevant legislation and policy, and outlines factors influencing the development of Council's weed management programs.

Cardinia has adopted the 'Weed threat matrix' which is a different approach to the majority of weed control programs undertaken by government agencies. It is based on the ecological value of specific sites where the highest quality sites are treated in the first year, then require less attention in subsequent years. This method preserves high quality sites and gradually expands them during the 10 years of this strategy.

The latter part of the strategy sets priorities for weed management in Cardinia Shire, Council's roles and responsibilities and the role of the community. A detailed action plan is provided guiding Council's investment (time, resources and funding) in weed management for the next 10 years.



# 2. Why a weed management strategy?

Cardinia Shire hosts a wide range of weedy introduced plants. Just over 400 species are considered to be naturalised in the municipality. Some of these are well established and widespread. Others are fairly recent introductions, with small populations. 36 of the 128 declared weeds listed under the *Victorian Catchment and Land Protection Act 1994*, are naturalised within Cardinia Shire, eight of these are also listed as Weeds of National Significance (WONS).

In 2007, Council recognised the importance of strategic weed control and developed the *Weed Management Strategy 2007*, to ensure weed infestations were appropriately managed, resources were effectively used and program outcomes monitored. In 2012, the *Pest Plant Management Strategy 2012–17* replaced the former strategy. This strategy continued the commitment of effectively reducing the prevalence and impacts of weeds across the municipality.

Community consultation workshops conducted in June/ July 2018 to gauge the community's perception of key biodiversity issues, revealed that poor coordination of weed management across land tenures was rated as one of the top 20 issues. Lack of funding, low compliance follow-up and lack of comprehensive environmental community education/ engagement program also rated as priority issues. These have been addressed in the action plan.

The challenge for Council is to develop weed management programs in a manner that meets the weed invasion and control pressures faced in a rapidly urbanising shire. This strategy charts the course of action to address this challenge, not just for Council, but for all land managers working collectively to reduce the impacts of weeds.

## 2.1 Vision, themes, goals and objectives

### Vision:

Council, agencies and community working collaboratively to protect Cardinia Shire's landscape, biodiversity and agriculture from the negative impacts of weeds

To achieve this vision, Council has framed this strategy around three themes which will guide the goals, objectives and actions.

- **Protect** – by preventing new weed invasions
- **Manage** – by strategically allocating resources to existing weed invasions
- **Engage** – by working in a collaborative manner with agencies and community

This strategy's high level goals and corresponding objectives link directly to the three themes of protect, manage and engage and align with the goals and objectives of the following strategies while addressing the needs and priorities of Cardinia Shire. See Table 1 for goals and objectives.

- the Australian Government's *Australian Weeds Strategy, Victoria's Invasive Plants*
- the Victorian Government's *Biodiversity Strategy 2037*
- the Victorian Government's *Animals Policy Framework*
- the Port Phillip and Western Port *Invasive Plants and Animals Strategy*



**Table 1: Goals and objectives**

<b>Goal 1: Protect Cardinia Shire’s landscape, biodiversity and agriculture from the threat of invasive weeds</b>	
<b>Objective 1.1</b>	Deliver on-ground weed management works consistent with Victorian and Australian government strategy and legislation.
<b>Objective 1.2</b>	Ensure current weed populations on Council land do not increase and new incursions are addressed through annual monitoring and program planning and delivery.
<b>Objective 1.3</b>	Provide support to landowners to protect biodiversity assets from weed invasions on private land and adjoining roadsides.
<b>Goal 2: Manage – strategically allocate resources to local weed priorities consistent with regional, state and national priorities</b>	
<b>Objective 2.1</b>	Demonstrate best practise weed management on Council-owned and managed land, ensuring that Council land is not the source of invasion to neighbouring properties.
<b>Objective 2.2</b>	Develop annual weed programs in collaboration with relevant agencies and community stakeholders to achieve a landscape scale approach.
<b>Goal 3: Engage and empower our community to motivate them to collectively address weed issues</b>	
<b>Objective 3.1</b>	Provide leadership and support to the community for strategic and cost-effective weed management.
<b>Objective 3.2</b>	Develop partnership programs with land managers, including private landholders, and volunteer groups such as landcare, and friends groups, to collectively reduce the impact of weeds.

## 2.2 Weed classification

Classifying weed species identifies particular traits that influence how they are controlled and managed. This includes the threat they currently or potentially pose to a region. Weeds can be significant at a property, local, regional, state or national level, based on their impact or potential impact. A number of listings of weeds are relevant to Cardinia Shire.

### 2.2.1 Nationally significant weeds

At a national level, the following three weed classifications are recognised (species lists are included in Appendix A).

**Weeds of National Significance (WoNS)** – Thirty-two WoNS have been declared by the Australian Government based on an assessment process prioritising these weeds on their invasiveness, potential for spread, and environmental, social and economic impacts. Consideration was also given to their ability to be successfully managed. National weed management guides and strategies are available for 20 of the 32 species. State and territory governments are responsible for legislating and administering the control of WoNS.

**National Environmental Alert List (the Alert List)** – this list complements the WoNS, identifying plant species that are in the early stages of establishment and have the potential to become a significant threat. It contains 28 non-native weeds that have established naturalised populations. Weed management guides are available for each of the 28 species.

**Sleeper weeds** – these are weeds that appear benign for many years, but may suddenly spread rapidly following certain natural events. Seventeen species have been identified as sleeper weeds, and 10 are thought to be eradicable.

### 2.2.2 State significant weeds

The main supporting legislation for the control of weeds in Victoria is the *Catchment and Land Protection Act 1994* (CaLP Act). Under the CaLP Act listed plants are declared as noxious weeds in Victoria. These plants cause environmental or economic harm or have the potential to cause harm. They can also present risks to human health. Responsibility for the control of noxious weeds is outlined in the CaLP Act and varies according to the category in which the weed is declared.

The CaLP Act defines four categories of noxious weeds (species listed in Appendix B) as defined below.

**State prohibited weeds** – these weeds either (a) do not occur in Victoria but pose a significant threat if they invade or (b) if they are present, they pose a serious threat and can reasonably be expected to be eradicated. If present, infestations of a state-prohibited weed are relatively small. If possible, they are to be eradicated from Victoria. The Victorian Government is responsible for their eradication but under Section 70(1) of the CaLP Act, Victorian Government may direct landowners to prevent their growth and spread.

**Regionally prohibited weeds** – these weeds are not widely distributed in a region but are capable of spreading further. It is reasonable to expect that they can be eradicated from a region and they must be managed with that goal. Landowners, including public authorities responsible for crown land management, must take all reasonable steps to eradicate regionally prohibited weeds on their land.

**Regionally controlled weeds** – these weeds are usually widespread in a region. To prevent their spread, ongoing control measures are required. Landowners have the responsibility to take all reasonable steps to prevent the growth and spread of regionally controlled weeds on their land.

**Restricted weeds** – this category includes plants that pose an unacceptable risk of spreading in Victoria and are a serious threat to another state or territory of Australia. The sale or trade of these weeds and their propagules is prohibited.

In addition, the Department of Environment, Land, Water and Planning (DELWP) has published an Advisory list of environmental weeds of the ranges bioregions of Victoria. This list is designed to assist in developing weed management plans, priority allocation of tasks and resources associated with weed control, management and extension activities, and policy development. No legal requirements flow from inclusion of a species in this advisory list, unless the species is already listed under other legislation where legal requirements apply.

Furthermore, the *Fisheries Act 1995* has declared some species as noxious aquatic plants. It is an offence to bring them into Victoria or possess, sell, transport or release them.

## 2.3 Significant weeds in Cardinia Shire

Of the 128 declared weeds listed under the Victorian *Catchment and Land Protection Act 1994*, (see appendices A, B and C for full list of declared noxious weed species), 36 are naturalised in Cardinia Shire and eight are also listed as WoNS.

Appendix C – Locally significant weed to Cardinia Shire lists primarily environmental weeds, but includes a number of problematic noxious weeds found in Cardinia Shire. The list is incorporated into Cardinia Shire's Planning Scheme under certain local provisions (see section on statutory planning for list of overlays this applies to). The inclusion of this list in the planning scheme schedules helps in educating the community and can provide a framework for enforcement under the *Planning and Environment Act (1987)*.



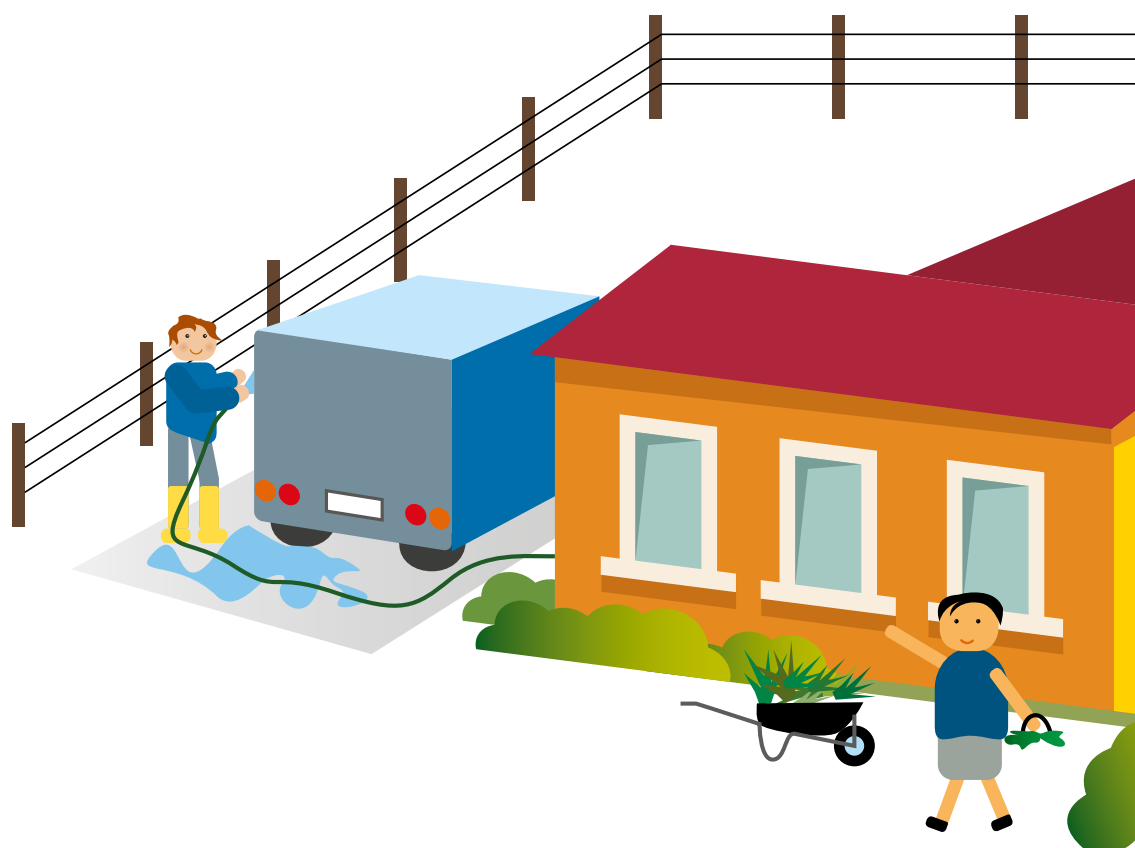


## 2.4 Sources of weeds

The origin of weed infestations in the shire's landscape is varied depending on geographical location. Common methods of weed spread includes through animals (carried on fur, in droppings, or through disturbed to soil), wind, water, drains, human boots/clothing and vehicles. Fire often stimulate the germination of weed seeds present in soil. The dumping of garden refuse and transportation of contaminated soil and animal fodder also accounts for many outbreaks of common weeds.

Biosecurity, enforced by the Department of Agriculture, plays an important role in the prevention of new outbreaks of weeds, but more importantly in the detection of new invasive species entering the state or into catchments where they are not yet present.

Biosecurity is a set of preventive measures, strategies and frameworks designed to reduce the risk of transmission of biological material (in this case weed species).



# 3. Managing weeds in Cardinia Shire

This section clarifies the roles and responsibilities of Council, agencies, community and landholders in weed control, according to land type. It highlights the importance of working collaboratively on weed management across the landscape and details the process of weed control program development.

Appendix E outlines all the Australian and Victorian government legislation and policies, along with Council policies relevant to managing weed species.

## 3.1 Roles and responsibilities

The legislative responsibility of landowners for weed control in Cardinia Shire differs according to land type. This includes Council-managed, private, and crown-managed land. Crown land may also differ in regards to the responsible agency. Crown land can be the responsibility of management committees or Council, or may have no designated land manager. The following describes the legislative responsibility of landowners according to land types within the shire.

### Council land

Council is responsible for managing regionally controlled and regionally prohibited weeds on Council-owned or managed land. DEDJTR is responsible for the control of state prohibited weeds. While Council may lease land for a variety of reasons, if lease agreements do not include enforceable clauses designating weed control, then weed control remains the responsibility of Council. In some instances, Section 86 committees of management are established by Council with delegated responsibilities under Section 86 of the *Local Government Act 1989* to directly manage facilities and grounds, for example recreation reserves, on behalf of Council.

Cardinia Shire Council is responsible for developing and implementing this strategy. It does so in collaboration with other agency and community stakeholders as identified in the action plan.

### Rail reserves

Vic Track is responsible for the maintenance of railway reserves. Under the CaLP Act, Vic Track is responsible for the control of regionally controlled and regionally prohibited weeds occurring in railway reserves. DEDJTR is responsible for the control of state prohibited weeds occurring in railway reserves.

### Puffing Billy railway corridor

Under the *Emerald Tourist Railway Act (ETR Act)*, the Emerald Tourist Railway Board (ETRB) has the responsibility for the preservation, development and maintenance of the railway line and its surrounds which constitute the railway corridor.

### Crown land

Under the *Crown Land (Reserves) Act 1978*, designated public land managers are responsible for managing regionally controlled and regionally prohibited weeds on reserved Crown lands. This responsibility for weed control may also reside with established committees of management. DEDJTR is responsible for the control of state prohibited weeds.

### Waterways

Melbourne Water is responsible for managing regionally controlled and regionally prohibited weeds along river banks and beds. Council commonly owns freehold land and is therefore responsible for managing regionally controlled and regionally prohibited weeds on this land. Private landowners are responsible for managing both regionally controlled and regionally prohibited weeds along waterways within private land. DEDJTR is responsible for controlling state prohibited weeds in all areas.



## Flora and fauna reserves, state forests and state parks

The Department of Environment, Land, Water and Planning (DELWP) is responsible for controlling all noxious weeds on Crown land managed under the *Forests and Lands Act 1987* such as state forests. Parks Victoria often fulfils this responsibility in its role as the appointed land manager in land areas managed under the *National Parks Act 1975* such as state and national parks.

## Roadsides

Managing invasive plants and animals on roadsides is regulated in principal by the *Catchment and Land Protection Act 1994* (CaLP Act). Other legislation affecting the control of these pests on roadsides is the *Road Management Act 2004* and the *Local Government Act 1989*.

The responsibility for roadside weed control depends on both the classification of roads under the *Transport Act 1983* and the classification of weeds under the CaLP Act. Currently, DEDJTR is responsible for the control of state prohibited weeds on all land, and regionally prohibited weeds on roadsides.

In Cardinia Shire, 368 areas of roadside are designated as being of 'very high' or 'high' conservation significance and as many of these roadsides occur on local roads, Council has traditionally taken responsibility for weed control in these areas. VicRoads (or local government acting as its agent) is responsible for managing all noxious weeds (except state prohibited weeds) on the declared road network. Under the *Road Management Act 2004*, the declared road network includes freeways, highways, and arterial roads. Roads that have not been declared under the act are known as 'undeclared' or local roads. Both Council and private landowners are responsible for managing regionally controlled weeds occurring on undeclared roadsides adjoining their land.

## Volunteer groups

Volunteers are important to achieving sustainable weed management outcomes. Whether it be on private or public land, volunteer groups are the key to ongoing detection and treatment of weed management issues. This complements Council's weed control programs and the key element to success is communication and collaboration between Council and the groups.

Numerous natural reserves in Cardinia Shire have associated volunteers ('friends' groups and committees of management) that assist with weed control activities and work with Council on other reserve-related matters. Council offers annual grants to these groups to support their activities. Opportunities for training and further education also exist for these volunteers.

Other volunteer groups include those under the Landcare program. Landcare supports the management of natural resources on private land and in some cases public land, with a focus on sustainable land use practises both on farmland and in bushland areas.

Cardinia Shire has 10 Landcare groups and more than 15 'friends' groups working across the shire to provide and promote responsible land use practices, including weed control and revegetation works and associated native vegetation monitoring.

## Landowners

Landowners, are key stakeholders in weed management as they occupy approximately 83 per cent of the land in Cardinia Shire. Their management actions directly influence the condition of soil, water and vegetation and, in turn, the condition of those assets influences their livelihoods, wellbeing and productivity.

Under the CaLP Act landowners are responsible for managing regionally controlled and regionally prohibited weeds on their land. DEDJTR is responsible for controlling state prohibited weeds on all land, including private land. Council engages with landholders regarding managing weeds on private land in order to achieve cross-tenure weed control outcomes, rather than focusing only on Council land.

See Section 3.3 – A collaborative approach to weed management.

## 3.2 Program development

### 3.2.1 Planning and prioritisation

Planning and developing weed prevention programs needs to be coordinated in conjunction with relevant land managers, for example government agencies, community groups and landowners. Program outcomes are reliant on this collaborative effort as it ensures that cross-tenure outcomes are achieved. This approach also has the added benefit of pooling funding, resources and knowledge.

By strategically prioritising assets and targeting specific weeds (using Council's weed threat matrix explained in Section 3.2.2), control measures are tailored to sites and treatment frequency is built into a rolling program (annual, biannual, 3-year cycles). This asset-based program development aligns with the recommendations made by the *Australian Weeds Strategy* and Victoria's *Invasive Plants and Animals Policy Framework*. It also enables Council to ensure the protection of critical natural resources continues to be a priority.

Victorian Government investment for the control of weeds and pest animals is largely guided by decision support tools and products, such as the Strategic Management Prospects tool and Natureprint mapping. This software has been developed by DELWP to assist land managers identify priority sites across Victoria where investment in weeds and pest animal programs will be most beneficial to the environment and the community.

### 3.2.2 Cardinia Shire 'weed threat matrix' and GPS mapping

To ensure a consistent approach to Cardinia Shire's annual weed programs, Council has developed a weed threat matrix (see Appendix D); a prioritisation tool guiding expenditure and establishing short, medium and long-term weed programs.

The weed threat matrix consists of two parts:

1. site prioritisation – identifying and ranking biodiversity assets based on a number of criteria that establish the environmental values contained or potentially contained in that parcel of land

2. weed assessment – identifying the weeds that pose the greatest risk to the assets at a site, using criteria based on the biology of the weed and population, its significance and impact, and ease of removal.

By recording and mapping the extent and type of weed invasions across the shire using GPS technology, Council is able to collect data to monitor existing weed species and record new and emerging weeds. This data is then applied to the weed threat matrix prioritisation tool to generate a score for the sites and level of weed threat. This information then feeds into planning and operational activities and provides greater clarity to the prioritisation of finite resources.

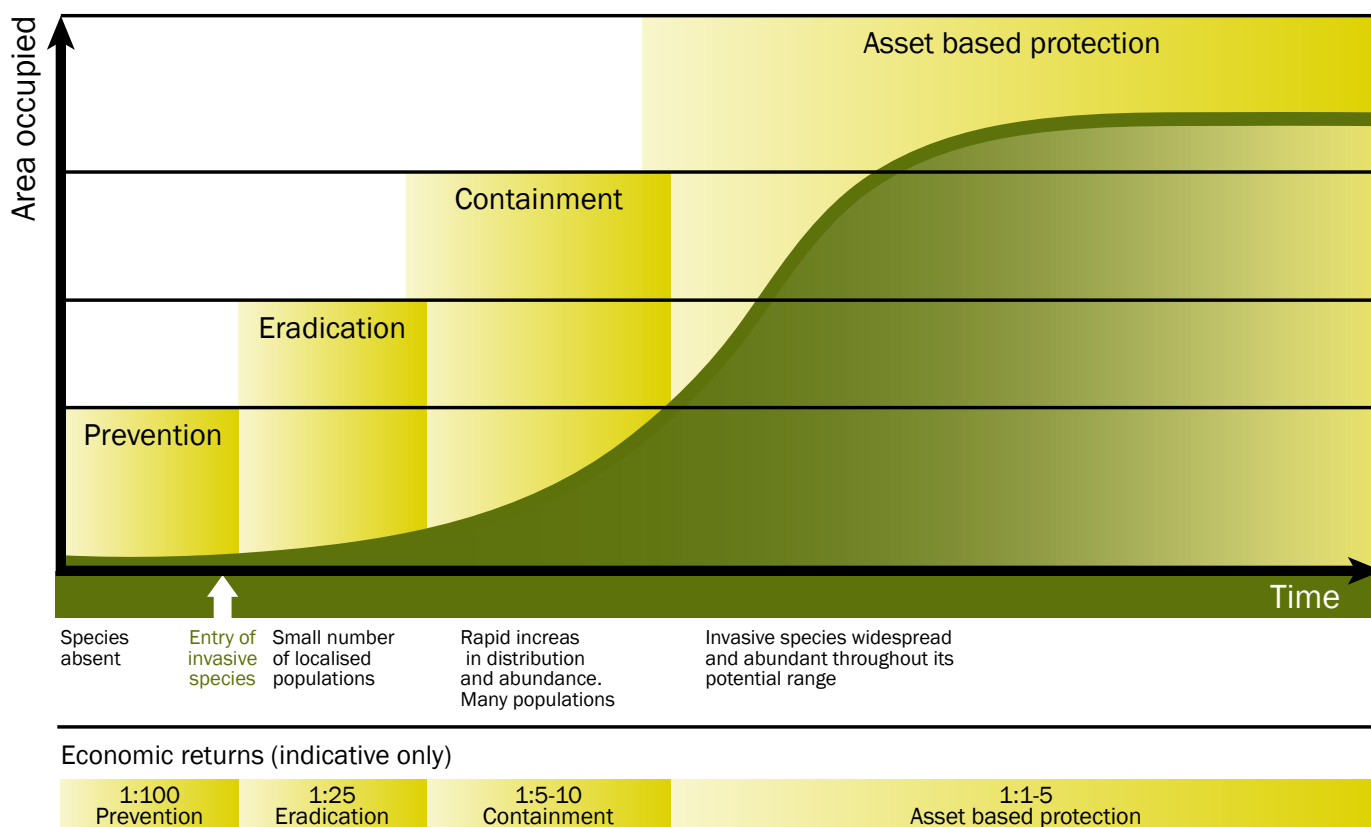
### 3.2.3 Biosecurity approach

Council has adopted the Australia wide biosecurity approach outlined in Victoria's *Biosecurity Strategy* and underlying *Invasive Plants and Animals Policy Framework* into planning and prioritisation of weed control activities in the shire. This approach recommends risk management to identify the threat of weeds to the environment, and then determines the most appropriate intervention to maximise public and biodiversity benefit. Interventional actions come in the form of prevention, eradication, containment or asset-based protection, depending on threat levels. The generalised invasion curve depicted in Figure 1 shows that the economic returns of preventing weed outbreaks from establishing in the shire, is far greater than trying to eradicate, contain and protect. It is important to note that this invasion curve is generalised and that good and bad investments at both ends of the spectrum will effect economic returns.

Given the rapid urbanisation of Cardinia Shire, rural zones in close proximity, and the development of major transport infrastructure, the importance of prevention and early intervention cannot be underestimated. This must be balanced with an emphasis on the ongoing management of many naturalised weeds in Cardinia Shire that pose a threat to biodiversity and other high value assets.



**Figure 1. Generalised invasion curve showing actions appropriate to each stage**



Source: Invasive plant and animal policy framework, Agriculture Victoria

### 3.2.4 Weed control in reserves and roadsides

Council manages 77 bushland reserves across the municipality, covering an area of approximately 840 hectares. Council also has more than 940 kilometres of roadsides of which 93 are considered to have very high conservation value.

Council must be highly strategic in distributing finite resources to manage weed threats in bushland areas and roadsides. Actions must also be directed to build ecosystem resilience as a priority, rather than simply targeting the removal of a particular species. In practice, directing strategic weed management and building ecosystem resilience will mean focusing on high quality environmental areas where indigenous species will

recolonise the treated site. This will also increase the extent of native vegetation in the reserve – a key goal of the Victorian Government’s *Native Vegetation Management Framework* and Council’s *Biodiversity Conservation Strategy 2019*.

Roadsides are vulnerable to weed invasion as they are subject to disturbance and the spreading of weeds by impacts such as machinery, slashing, neighbouring properties, drains and the dumping of garden refuse. They are a major area for concern for government and private landholders in terms of the potential serious effect on agricultural production, the natural environment and rural communities.

The significance of vegetation on roadsides is widely recognised and many roads are dominated by largely undisturbed remnant vegetation. This provides habitat for flora and fauna, landscape character and provides important corridors to larger areas of indigenous vegetation.

The management of invasive plants and animals on roadsides is principally regulated by the CaLP Act. Other legislation affecting the control of weeds on roadsides includes the *Road Management Act 2004* and the *Local Government Act 1989*. Responsibility for the operational management of roadside invasive plants is complex in nature despite legislation and has been debated for some years.

Some weed species on roadsides can provide habitat cover for species such as the southern brown bandicoot in certain localities across Cardinia Shire, including Bunyip, Bayles, Nar Nar Goon, Tynong, Cardinia and Garfield. Careful planning of weed control programs in these sensitive areas is required in order to minimise disturbance and allow for habitat restoration.

The development of a Roadside Management Plan would consider the various roles of Council on roadsides (including grass slashing, tree works, drainage works and weed control) and outline how to best manage multiple objectives to achieve appropriate outcomes. Weed management on roadsides is one of many factors that needs to be considered to find a balanced approach, protecting indigenous vegetation and reducing fire risk.

Council has a role to play in supporting community group efforts for weed control where Friends groups or others take ownership in council reserves, and provide incentives and education for controlling weeds on private land, Areas of public land with high conservation significance such as state forest should also be protected from the threat of weeds from neighbouring land, whether council or privately owned.

### 3.3 A collaborative approach to weed management

Given the widespread status of weeds across the landscape, for many species there is no potential for eradication. As part of a new approach to biosecurity and effective weed management, recent emphasis has been placed on a citizen-focused approach, underpinned by more collaborative working arrangements between community and government.

Collaboration between Council, agencies and community groups to plan and deliver programs targeting problematic weed threats, achieves by far the best possible environmental outcome. It is important that future efforts are focused on developing new partnerships and expanding on current collaborations across all land tenures. Novel ideas need to be investigated and a number are proposed in the action plan.





## Case study

### Cardinia Creek riparian rehabilitation project

A working example of a successful partnership model is the multi-stakeholder environmental project located in the Cardinia Creek corridor. This project is funded by the Department of Environment, Land, Water and Planning. (DELWP) through the Peri Urban Weed Partnerships Initiative 2017–20. Agencies and community groups pool knowledge and resources, together to plan and deliver environmental outcomes at a catchment scale.

The project targets weed threats across multiple land tenures, including council bushland reserves, stream frontage reserves, roadsides, and public land, which occur alongside Cardinia Creek between Beaconsfield to the south, and Cardinia Reservoir Park to the north. The key objective is the restoration and protection of bushland located along the creek.

The partners to this project are Cardinia Shire Council, Parks Victoria, Melbourne Water, the Cardinia Environment Coalition, Vic Roads, Cardinia Creek Landcare Group, and the Friends of Cardinia Creek Sanctuary. Other participating community and corporate groups are local golf courses, scout groups, schools, and adjacent landholders. Cardinia Creek forms the municipal boundary between Cardinia Shire and the City of Casey, and as such, this project integrates with environmental works occurring through the City of Casey environmental works program.

Monitoring and evaluation of the project outcomes to date has revealed a general trend of a greater diversity of native plant species, through the eradication and containment of high threat weeds.

The biodiversity outcomes as a result of the works delivered are clearly a testament of joint effort and collaboration. This partnership model of working has meant complementary works are done in a targeted and strategic way, to achieve a better return on investment of funds and resources.

### 3.4 Community led programs and empowerment

For effective invasive weed programs, it is important for all levels of government to strengthen community capacity and confidence to take action on weeds. Agriculture Victoria supports community led programs such as the Victorian Blackberry Taskforce (VBT). These groups are led by active Victorian community members who are concerned about the impact of Victoria's worst invasive weeds. These groups are collectively called community pest management groups (CPMGs) and have been working with community members for years, supporting them to take action on pest species and building networks in the community. Council actively seeks opportunities to support community interest in these programs and strongly advocates the practices for short and long term benefits, to landowners and the environment.

Further opportunities exist for improvements to weed control including knowledge sharing, particularly through digital mechanisms, understanding the role of demographics and investigating the effectiveness of enforcement to support community led action (Agriculture Victoria, 2017).

Inappropriate land management practices on privately owned land can be a major cause of habitat loss and weed invasion. A change in these practices requires education and engagement. Changing human behaviour can be difficult and engaging landowners in making changes is no exception. Many possible factors influence landowner decisions and these vary according to each landowner and each property context. Effecting change in landowner behaviour is problematic because the private benefits of action by landowners are often uncertain. Commitment by government to enforce compliance or directly fund on-ground work is also limited.

The key issue here relates to how to motivate disengaged landholders and how to reach key audiences. Past studies, including a social research project conducted in 2012 through a partnership with Johns Hill Landcare Group and Cardinia Shire (*Why don't they manage their weeds?*), revealed that the three most dominant social barriers preventing landowners taking action are time, money and

knowledge. It follows then, that interventions focusing on engaging and building human and social capacity, including one-on-one engagement, participation in groups, and involvement in short courses and field days have positive effects on adopting action.

### 3.5 Community education

Education is vital for increasing the community's understanding of weed issues and empowering individuals to take action to control weeds. Local government plays an important role in weed and environmental education for the community. Landholders in our shire have positively received the following weed management initiatives:

- **weed control grants scheme**
- **Weed Identification Guide environmental weed management kit**
- **Weed Busters week and Trees for Weeds swap**
- **Gardens for wildlife program.**
- **Biodiversity Incentive Scheme**

A suite of environmental education programs are provided, aiming to connect people with nature and link sustainable land management practises to healthy ecosystems. The rich knowledge bank and skills which exist amongst various Landcare and other environment groups is a great source of information for the broader community.





# 4. Local legislation and compliance

This section outlines mechanisms that are vested under local government through Victorian Government legislation, to enforce the control of weeds. Cardinia Shire Council's Local Laws and Planning Scheme are two of these mechanisms.

The *Local Government Act 1989* provides councils with the power to develop local laws concerning weed control within their municipalities. These local laws must be consistent with existing acts and/or regulations, and must not duplicate or be inconsistent with the planning scheme.

Under the *Catchment and Land Protection Act* 'it is the responsibility of land owners to take all reasonable steps to prevent the spread of regionally controlled weeds and established pest animals on a roadside that adjoins the land owner's land'.

Cardinia Shire is one of the few interface councils that have implemented a local law on weed control. The Local Law no. 17 Environment, Amenity and Asset Protection, Clause 58 states:

'The owner or occupier of land must not allow the land or adjoining nature strip to be a haven for noxious weeds, environmental weeds or pest animals'.

Weed issues arising on properties are enforceable under Local Law no. 17. Landholders breaching this local law by uncontrolled weed infestations will receive notification enforcing the removal of these weeds.

Although the Victorian Government provides some level of support to assist in weed enforcement for large properties, this is limited and has considerably reduced over time. As a result, the challenge exists to ensure landholders meet their legislated requirements to control noxious weeds on their land through Council's Local Law no. 17.

## 4.1 Statutory planning

Statutory planning provides an essential framework for future sustainable development and can play a significant role in weed management, especially when land is being developed. The planning scheme sets out policies for the use, development and protection of land, providing Council with opportunities for influencing vegetation management on private land.

It is important to note that while planning regulations can assist in the management of weeds, they can also hinder this process. Certain overlays and regulations placed on land may restrict the ability of landholders to remove or control weeds. Such limitations, including erosion control, heritage and community values, habitat protection and infrastructure damage, recognise that in certain situations the removal of weeds may be detrimental. To assist this, Council has put an exemption in place for the need to apply for a permit to remove high threat weed species.

Appendix C lists locally significant weeds to Cardinia Shire, which consists primarily of environmental weeds but includes a number of problematic noxious weeds found in the shire. The list is incorporated in the planning scheme under nine schedules within three overlays.

The inclusion of this list in the planning scheme schedules helps with public education and can provide a framework for enforcement under the *Planning and Environment Act (1987)*.

#### 4.1.1 Planning permits

Planning permit conditions provide Council with a valuable tool to educate landowners and enforce environmentally responsible behaviour. While the use of planning permit conditions is limited to cases of new land use and development, it provides Council with an important method of protecting and/or improving remaining biodiversity assets. Permit conditions often used include avoiding the planting of weeds, the control of existing weeds, and for replacement indigenous plants to compensate for vegetation loss to be sourced from indigenous nurseries.

Planning conditions can be applied to new high-density residential developments in urban areas that prohibit the use of weeds listed in the planning scheme. This also ensures that known or potential weed species are not planted in urban landscapes (e.g. street trees).



#### 4.1.2 Planning guidelines

Landscaping plans submitted to Council as part of a planning application need to be reviewed by Council's landscape officer to ensure that no environmental weeds are included on the plant list. This requires Council staff to cross-check plant lists with the weed list in the planning scheme. To improve the process a reference may be made to the planning scheme weed list when developers obtain permit applications or seek advice on developments. The onus is then on the applicant to select suitable landscaping plants.

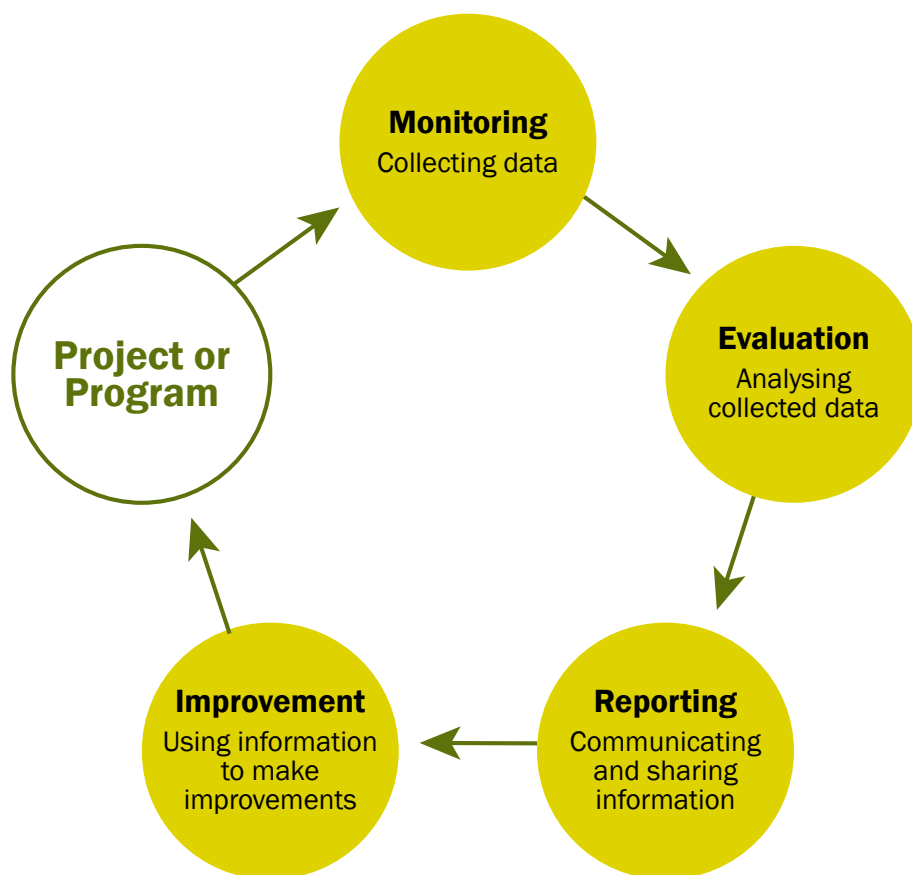
The guidelines for the removal, destruction or lopping of native vegetation is a resource that defines avoidance, minimising and offset principals for planning applicants that include native vegetation removal. These guidelines and supporting documentation are publicly available on the DELWP website.

# 5. Monitoring and review

To help understand whether Council’s investment in weed programs is achieving planned outcomes, the design of weed management programs integrates monitoring and evaluation activities from the outset. Program review can then be based on the outcomes of this monitoring, thereby assisting in making better strategic decisions for long-term weed management.

This can be done through the cycle of monitoring, evaluation, reporting and improvement (MERI), as illustrated in Figure2, which is a simple concept developed by the Victorian Government which, when applied, helps us understand what is being achieved and identify possible improvements for projects and programs.

**Figure 2. The Monitoring, Evaluation, Reporting, Improvement (MERI) cycle**



The use of GIS data capture of weed occurrences across the shire provides a real time snapshot of the extent, type and locations of weed populations, and is an effective dataset to base program planning and monitoring against.

Progress of the actions in this strategy will be reviewed in 2024. A more detailed review of the entire strategy, including progress towards the objectives outlined under each of the three goals, will take place after its conclusion in 2029.

# 6. Abbreviations

<b>AV</b>	Agriculture Victoria
<b>CaLP Act</b>	<i>Catchment and Land Protection Act 1994</i>
<b>CEC</b>	Cardinia Environment Coalition
<b>CPMGs</b>	Community Pest Management Groups
<b>DEDJTR</b>	Department of Economic Development, Jobs Transport and Resources
<b>DELWP</b>	Department of Environment, Land, Water and Planning
<b>EPA</b>	Environment Protection Authority
<b>ETR Act</b>	<i>Emerald Tourist Railway Act</i>
<b>ETRB</b>	Emerald Tourist Railway Board
<b>MW</b>	Melbourne Water
<b>PPWCMA</b>	Port Phillip and Westernport Catchment Management Authority
<b>VBT</b>	Victorian Blackberry Taskforce
<b>WONS</b>	Weeds of National Significance

# 7. References

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*Sustainable Environment Policy (2018–28)*

*Biodiversity Conservation Strategy (2019–29)*

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### **Banner photos – some of the weeds we want to control**

Page 1	Cape ivy
Page 3	Montbretia
Page 5	Agapanthus
Page 7	Sweet pittosporum
Page 9	Angled onion
Page 11	Flax-leaf broom
Page 13	Blackberry
Page 15	Cestrum
Page 17	English ivy

### **Page photos**

Page 7	Ragwort
Page 12	Radiata pine
Page 13	Blue periwinkle
	Cardinia Creek riparian landscape 2016 (during project works)
Page 14	Hawthorn
Page 26	Bulbil Watsonia



# Weed Management Strategy

## 2019–29

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