

## 6.5.2 Environment Quarterly Report

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### Recommendation(s)

That Council note this report

### Executive Summary

This report provides a summary of some key projects, services and actions delivering environmental benefits across the work of Council. Projects have been categorised according to the Sustainable Environment Policy (SEP) 2018–28 themes of:

- Biodiversity
- Climate change
- Water
- Waste and resource recovery

The SEP is the roadmap for the future direction of Council's environmental and sustainability strategies, plans and activities.

A similar report will be presented each quarter highlighting new programs or projects that have achieved significant milestones.

### Background

There are a broad range of projects, services and actions delivering environmental benefits throughout the organisation. While many of these occur within or are led by the Environment and Infrastructure Group, most of the organisation is involved in environmental sustainability to some degree. Below is a highlight of some of the key projects currently being undertaken.

All actions fall within the Council Plan 2021–22 under the key priority area of Thriving Environment 'we value our natural assets and support our biodiversity to thrive'.

### *Project update*

Projects and updates are included in the attached report, along with a list of the key actions/projects from our environment strategies and annual programs for 2021-22.

## ***Biodiversity***

Council Plan action – Protect and improve biodiversity by increasing the area of natural ecosystems across the Shire.

Council Plan action – Preserve and improve our bushland and natural environment by implementing weed management strategy and programs and continuing activities on high conservation bushland reserves and roadsides.

### **Shelterbelt guidelines**

Description	<p>After the 2019 Bunyip Complex fires, Council’s Recovery team Officers and Environment staff engaged with Landcare groups and the fire effected community to compare observations of fire behaviour around shelterbelts.</p> <p>This led to the development of the <i>Shelterbelt Guidelines for Climate Change 2020</i> project. Eco Logical Australia were engaged to conduct research and develop guidelines.</p> <p>This project has the following deliverables:</p> <ul style="list-style-type: none"> <li>• Research document report <ul style="list-style-type: none"> <li>– A5 Booklet for landholders</li> <li>– A poster presentation summarising the project to be promoted at the National Landcare Conference 2021</li> </ul> </li> <li>• A short video depicting fire effected shelterbelts and landowners in the Bunyip North, Garfield North, and Tonimbuk areas.</li> </ul>
Funding	<p>\$25,000 through the Bushfire Response funding, and \$8,000 from Westernport Catchment Landcare Network and Work for Victoria volunteers.</p>
Update	<p>The guidelines aim to provide key information needed to design and construct shelterbelts that are resilient to climate change and assist in mitigating the local climate change impacts including higher temperatures, reduced rainfall and more extreme weather events including drought, heatwaves, bushfires and intense storms. The guidelines provide easy access to key recommendations on shelterbelt orientation, planting density, location, species selection and maintenance to adapt to climate change, increase agricultural production, protect built assets and enhance biodiversity.</p> <p>The draft guidelines were circulated to targeted stakeholders for feedback. This feedback is now being reviewed before the guidelines are finalised. Plans for a soft launch are being made for late 2021, with a major launch to be held at a Land Management Conference being held in Cardinia Shire during April 2022.</p> <p>A demonstration shelterbelt using the guidelines to design with approx. 1000 indigenous tube stock has been installed at a fire effected Tonimbuk property in April 2021 through the funding and on ground assistance of Western Port Catchment Landcare Network and Work for Victoria crews.</p>

**Australasian Pest Vertebrate Conference**

Description	The 18 <sup>th</sup> Australian Pest Vertebrate Conference (AVPC) was held over three days, online and hosted by the Centre for Invasive Species Solutions, in partnership with Agriculture Vic, Department of Agriculture, Water and the Environment,
Update	<p>The AVPC saw over 400 individuals come together to discuss a feral free future over six plenary sessions, 120 concurrent presentations, two masterclasses, two special night events, an interactive exhibition and a partnership with the Kids' Conference team.</p> <p>Presentations included managing feral cats in the peri urban area, deer, wild dogs/foxes, carp, community integrated pest management, technologies, innovations, and research into pest animal control.</p> <p>Of special interest was the presentation on managing feral deer in the peri urban context, particularly as Cardinia Shire is contributing to the drafting of the DELWP led Peri Urban Regional Deer Control Plan, which is an action that has arisen from the Victorian Deer Control Strategy.</p>

**Draft Biolink Plan consultation**

Description	The draft Biolink Plan seeks to connect highly fragmented vegetation across the shire and encourage the movement of wildlife by providing a framework to support voluntary conservation management works that are safe to people and property.
Funding	This project has been jointly funded by the Victorian Government and Council.
Update	<p>Significant consultation was undertaken in April with community groups and stakeholders via eight workshops and information sessions and also via input using the Creating Cardinia web platform.</p> <p>The Creating Cardinia platform was highly commended by stakeholders as state-of-the-art consultation delivery.</p> <ul style="list-style-type: none"> <li>• 87 separate contributions were received on the Biolink plan interactive map</li> <li>• 6 public community questions were responded to.</li> </ul> <p>Feedback is being reviewed for incorporation into the plan. This includes significant contributing comments from the CFA and the Municipal Fire Prevention Planning Committee to align the Biolink plan with the recently released Metropolitan Bushfire Management Strategy which will further improve the plan. DELWP have also recently offered to undertake additional analysis of the plan, at no cost to Council, using the latest technology Bushfire risk mapping software which will provide additional information on the optimal make up and alignment of each of the mapped 113 corridors.</p>

**Gardens for wildlife update**

Description	Gardens for Wildlife online webinars
Funding	This program is funded by Council
Update	<p>Council ran six free gardens for wildlife online workshops during February and March to show residents how to create a garden that attracts wildlife:</p> <ul style="list-style-type: none"> <li>• Your garden for wildlife - garden design, preparation and maintenance</li> <li>• Beautiful birds – attracting small birds to your garden</li> <li>• Beautiful butterflies and native bees – creating an insect friendly garden</li> <li>• Lovely lizards – creating a lizard, skink and gecko friendly garden</li> <li>• Furry friends – creating a native mammal friendly garden</li> <li>• Fabulous frogs - creating a frog pond</li> </ul> <p>A total of 255 people attended the workshops and 3837 additional people visited Council's Gardens for Wildlife webpage during the events. Prior to the workshops we had 110 people viewing the webpage per year.</p> <p>Each participant was eligible for a \$20 free plant voucher for the new Cardinia Environment Coalition Nursery at Deep Creek Reserve. This voucher will enable them to commence planting their new wildlife garden.</p> <p>The webinars have proved highly successful, and we intend to run more webinars in the future.</p>

**Indigenous plant giveaway**

Description	Two free indigenous plants available to the first 2000 residents who attended the CEC nursery. A proof of address is required to take advantage of this program.
Funding	This initiative is fully funded by Council
Update	<p>Council commenced a free indigenous plant giveaway celebrating the opening of the Cardinia Environment Coalition Nursery Inc at Deep Creek Reserve.</p> <p>The plant giveaway was funded through the delivery of Council's Aspirational Energy Transition Plan 2014-24 which stated the program will:</p> <ul style="list-style-type: none"> <li>• improving biodiversity for local fauna</li> <li>• improving amenity</li> <li>• capturing carbon emissions</li> <li>• improve river health and reduce erosion.</li> </ul> <p>The giveaway proved popular with approximately 300 residents attending the first morning.</p> <p>Residents were thrilled to find plants that would suit the local soil type, require little maintenance and provide habitat for wildlife, with many residents wanting to see more birds, butterflies and bees. Residents enjoyed the “socially distanced” community connection and shared stories of their gardens. The new nursery is becoming a fabulous community environmental resource and a place for like-minded gardeners to connect.</p> <p>Given the recent lockdowns community members are increasingly turning to gardening and are enjoying the mental health benefits of being out in the fresh air and gentle exercise.</p>

**Bushland team works**

Description	Works in Council's bushland reserves that included revegetation and weed management
Funding	The natural reserve team and their works are funded by Council.  The corridors of green works are funded by Melbourne Water
Update	<p>The Natural Reserve Team have been busy undertaking their annual maintenance program. This has included inhouse crews undertaking weed control works across bushland reserves and revegetation of over 2,800 indigenous tubestock planted over the past few months. The tube stock is sourced from three of our local indigenous nurseries.</p> <p>The Working for Victoria bushland maintenance team have assisted in a number of these planting works and woody weed control programs. They have achieved a great deal of works at several sites such as Emerald Lake Park, Cardinia Aqueduct Trail, Bunyip Sanctuary and Pepis Land.</p> <p>Friend's groups have had continued support, however due to COVID-19 restrictions their activities have been sporadic and limited.</p> <p>Reserve Rangers have worked alongside our contractors to deliver outcomes for Year 1 of the Corridors of Green Projects, funded by Melbourne Water. The program is set to continue for another two years across seven of our bushland reserves. Works include weed control and revegetation.</p> <p>The team are currently undertaking audits on our reserves to assess the works plan successes, identify key learnings to improve programming and to assist in the scheduling for the coming financial year.</p>

***Climate change***

Council Plan action - Adapt to the impacts of climate change by working in partnership with the South East Councils Climate Change Alliance (SECCCA) and both Victorian and Australian Governments

Council Plan action – Reduce Council's energy consumption and help the community to do likewise.

**Victorian Energy Collaboration (VECO)**

Description	Cardinia is one of forty-six Victorian councils to sign on to the Victorian Energy Collaboration (VECO), the largest ever emissions reduction project by local government in Australia. Through VECO participating councils will be provided with 100 per cent renewable energy for their electricity needs.
Funding	Council's energy costs are funded through the operating budget of Council.
Update	<p>Council will begin to transition the bulk of its buildings and facilities, including streetlights, to the renewable energy procurement project from 1 July 2022, following the conclusion of its current energy contract.</p> <p>Once all councils are on board, 45 per cent of Victorian council electricity will be sourced from wind energy, reducing a combined total of greenhouse emissions by 260,000 tonnes of CO<sub>2</sub>-e every year - equivalent to powering 48,000 homes or taking 90,000 cars off the road annually.</p>

**Water**

Council Plan action – Manage water in an integrated way, including the reduction of potable water consumption by Council and households.

Council plan action - Promote water catchment management practices that improve the quality of our waterways

**Deep Creek Reserve: wetland wonder project**

Description	Deep Creek Wetland Wonders project
Funding	This project is jointly funded by Council and Victorian Government (DELWP)
Update	<p>Work on the construction of the boardwalk at Deep Creek reserve demonstration wetlands is soon to commence with help from funding from DELWP. The boardwalk will include three trails that lead to a central platform where you will be able to view and access the water.</p> <p>Along the pathways will be education interpretation signage and interactive 3D models focusing on water insects, frogs, water birds and the water catchment. Traditional owner knowledge about wetlands is also proposed to be displayed. The boardwalk and interpretation are planned to be finished by the end of 2021.</p>

**Passive irrigation trial**

Description	Passive Irrigation Trial: using road runoff to water street trees
Funding	This trial is jointly funded by Melbourne Water (\$20,000), University of Melbourne (\$5,000) and Council (\$25,000)
Update	<p>Street trees are being watered using carpark stormwater at a trial site in IYU Reserve. Stormwater from the carpark is piped into coarse gravel adjacent to the tree root zones as a supplementary water supply. Potential benefits include improved growth and canopy cover to mitigate the urban heat effect, additional water source for trees in climate change and a reduction of runoff to our downstream farmland.</p> <p>University of Melbourne will monitor tree growth of irrigated trees against control trees (no supplementary irrigation) and measure stormwater infiltration for two years.</p>

### ***Waste and resource recovery***

Council Plan action – promote practices that result in the reduction per household of the amount of waste going to landfill, particularly food waste.

#### **Waste rebates uptake**

Description	Council offers several waste rebates, to encourage residents to invest in reusable products and reduce the amount of waste sent to landfill. This aligns with the Waste and Resource Recovery Strategy. These rebates are for compost bins/worm farms, mulchers, reusable sanitary products and reusable nappies.
Funding	This initiative is fully funded by Council's garbage charge.
Update	There has been excellent uptake of the program since it was introduced, receiving a lot of positive feedback from residents. In the past 12 months 362 rebates have been processed, a total of \$20,500.

#### **Drop-off waste event results**

Description	<p>As part of the Waste and Resource Recovery Strategy actions; to implement a suite of options that provide alternatives to burning off, Council offers free green waste drop-off weekends at two transfer stations twice a year. The green waste is transferred to composting facilities and becomes soil improver.</p> <p>Detox Your Home is a Sustainability Victoria program supported by Council, held annually. A free service for residents to safely dispose of unwanted household chemicals.</p> <p>drumMUSTER is a product stewardship scheme for agriculture and veterinary chemical producers supported by Council, held annually.</p>
Funding	<p>The green waste drop-offs are fully funded by Council's garbage charge.</p> <p>Detox Your Home is funded by Sustainability Victoria, including staffing.</p> <p>drumMUSTER is supported by Council through the provision of staff and recycling collection.</p>
Update	<p>The first free green waste drop-off for 2021 was held at Cleanaway Lysterfield on 26 - 29 March, with 33.9 tonnes of green waste dropped off. The second drop-off was held at Future Recycling Pakenham on 16 - 19 April, 67.22 tonnes of green waste was dropped off over the four days.</p> <p>A total of 481 drop-offs occurred between the two sites. The next service will be offered in November 2021 in preparation for the fire season.</p> <p>Detox Your Home and drumMUSTER were held concurrently on Saturday 17 April 2021. Detox Your Home collected just over 3 tonnes of hazardous chemicals from 133 householders. This was fewer attendees than the last detox event in 2019 but a larger volume of chemicals collected.</p> <p>drumMUSTER collected 273 drums from 7 attendees, twice the number of drums than the last collection.</p>

**New public place and dumped rubbish contract**

Description	The public place contract ensures the collection of waste and recycling from public places, shopping strips, parks and active reserves in the shire.
Funding	This service is fully funded by Council's garbage charge.
Update	<p>Historically, these services were provided by an in-house team before being outsourced in 2015 to JJ Richards &amp; Sons.</p> <p>A review was recently undertaken of this service and it was determined that Council should go to market to see if improvements could be made on this contract.</p> <p>Before going out to tendering earlier this year the public place contract was expanded to include collection of illegally dumped rubbish, due to increasing service demand. Previously illegally dumped rubbish was not contracted out but collected in agreement, as needed. This will allow for a more reliable and timely collection of dumped rubbish.</p> <p>The tender process has delivered a significant cost reduction and the new contractor, Total Waste will commence operations in July 2021.</p> <p>Council officers will be focused on implementing the new contract over the next few months to ensure continuity and quality of service.</p>

**Bookable hard waste – one year on**

Description	In July 2020 Council began the new bookable hard waste service, replacing the previous shire-wide blanket collection and delivering one of the key Waste and Resource Recovery Strategy actions.
Funding	This service is fully funded by Council's garbage charge.
Update	<p>The COVID-19 pandemic and associated restrictions saw an increase of 50% in hard waste disposal on the previous year's tonnages for the last shire-wide blanket collection in May 2020.</p> <p>The new bookable hard waste services came into effect on 1 July 2020, during one of Victoria's hard lockdown phases. COVID-19 continues to influence waste collection, with the more recent short circuit breaker lockdown seeing bookings increase by 20%.</p> <p>The service currently averages 500 collections per week. The December holiday season saw demand increase, peaking in the Christmas – New Year period.</p> <p>As of 9 June, 20,000 hard waste bookings have been completed, with approximately 3,500 – 4,000 tonnes of waste collected. A reduction of about 1,600-2,000 landfill tonnes from the previous financial year, saving council approximately \$200,000-250,000 in landfill costs.</p> <p>Recycling is slightly short of the 20% target, given the slower demand from July to September, but is expected to improve now that we are one year on and the community is aware of the services.</p> <p>The service will continue to be reviewed, as part of the continuous improvement process to ensure that the service fits with community expectations.</p>



## Projects planned for 2021-22

### *Strategy delivery*

- Implementation of Weed Management Strategy
  - Undertake weed mapping of selected bushland reserves and roadsides of high conservation significance
  - Recruit part time Land Management Officer to work in partnership with landholders to improve land management outcomes
- Implementation of Biodiversity Conservation Strategy
  - Finalise development and adoption of Cardinia Shire's Biolinks Plan
  - Recruit a full time Environment Education Officer
  - Liaise with local aboriginal groups over the annual Council natural resource area works plans
  - Prepare guidelines for developers to encourage indigenous plantings
  - Develop and install interpretation signage at Mt Cannibal
  - Undertake roadside vegetation assessments and install signage
  - Develop a prioritised inventory of natural resource areas requiring reserve management plans and prepare
- Implementation of the Integrated Water Management Plan
  - Continue to participate in the Westernport Integrated Water Management Forum including implementation of key regional projects;
    - Growth Area IWM analysis project
      - Westernport Integrated Water Management Plan for the region
  - Aquifer Storage and Recharge in Casey and Cardinia
  - Liaise with internal stakeholders to investigate incorporating water re-use opportunities into new recreation facilities at the design phase.
  - Completion of the Deep Creek Wetlands Wonder project including installation of boardwalk and interpretation displays/interactive elements
- Implementation of the Waste and Resource Recovery Strategy
  - Continuation of new kerbside food waste diversion service and behaviour change program
  - Continuation of bookable hard waste collection
  - Implementation of public place waste and recycling collection and disposal contract
  - Implementation of dumped rubbish services
  - Expansion of waste rebate program
  - Continued education and engagement of community on usage of waste services
  - Emergency response and service adjustments for COVID related waste concerns in the community
  - Participation in group procurement (metropolitan Melbourne wide) for landfill services
  - Participation in group procurement (Victoria-wide, regional subgroups) for recycling processing services
  - Recycling Victoria Policy – kerbside transition planning
  - Development of procedures for key waste processes for planning and development
  - Develop kerbside Waste Service Policy
  - Continuation of garbage charge service auditing and recovery program
  - Reengage with community on waste service after 2020 shutdowns of public engagement
  - Nar Nar Goon former landfill EPA maintenance requirements

- Implementation of the Aspirational Energy Transition Plan
  - Purchase of fleet carbon offsets
  - Transition away from gas for council facilities
  - Continued investigation and delivery of rooftop solar energy installations e.g. Civic Centre.
  - Continuation of community engagement programs i.e., New Home Energy Advisory Service, Sustainable Living workshops, Environmental Upgrade Agreements.
  - Continued involvement in project development in the South East Councils Climate Change Alliance (SECCCA):
    - Electric Vehicle Infrastructure Planning Project
    - Asset Vulnerability Assessment and Bushfire Case Study
  - Development of the Council Climate Adaptation Strategy

### ***Annual programs***

- Coordination of grants:
  - Annual Weed control grants to reduce weeds on private and public land
  - Annual Heritage grants to conserve places protected under the heritage overlay
  - Biodiversity Incentive grants on private land
  - Distribute annual friends group support grant
  - Trust for Nature rate reimbursement scheme
- Continued community collaboration and awareness programs:
  - Annual trees for weeds swap day
  - Gardens for wildlife program
  - Kinders biodiversity education program
  - Schools environment excursions with Ecolinc and Primesci at Deep Creek Reserve
  - Community plant giveaway from indigenous plant nursery
  - Indian Myna trapping program (sale of traps)
  - Schools and kindergarten waste education program
  - Community waste education program