

## 6.5 Activity Reports

### 6.5.1 Environment Council Plan Initiatives Quarterly Report

**Responsible GM:** Peter Benazic  
**Authors:** Desiree Lovell and Kerrie Lamble

#### Recommendation(s)

That this report be noted

#### Attachments

1. Environment Council Plan initiatives quarterly report - October 2023 [6.5.1.1 - 12 pages]

#### Executive Summary

This quarterly report provides an update on projects, services and actions that are undertaken by Council to deliver on the Council Plan focus area number three: thriving environments and its associated initiatives.

#### Priority: We value our natural assets and support our biodiversity to thrive

We place a high value on our natural assets and biodiversity. We take action to help our natural assets and biodiversity thrive and build their resilience to climate change and natural hazards. We enhance green spaces and habitat links, support our communities to live sustainably, and champion sustainable development and waste management practices.

#### Initiatives

The initiatives 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.

#### 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.

Council Plan initiatives and how they link to the *Sustainable Environment Policy* themes:

- Biodiversity
  - Implement initiatives in the *Biodiversity Conservation Strategy*
- Climate change
  - Implement initiatives in the *Aspirational Energy Transition Plan*
- Water
  - Implement initiatives in the *Integrated Water Management Plan*
- Waste and resource recovery
  - Implement the action plan for the *Waste and Resource Recovery Strategy*

This report also covers the Council Plan initiative *actively protect key heritage sites within the shire*.

### **Project update**

Projects and updates are included in the attached report

## ***Biodiversity***

Council Plan initiative

- Implement initiatives in the *Biodiversity Conservation Strategy*

This section also includes updates on the implementation of the *Weed Management Strategy*

### **Council offset works**

|             |   |
|-------------|---|
| Description | <p>Implementation of 10-year offset management plan actions, to offset vegetation loss in the shire due to new residential development.</p> <p>A native vegetation offset is a requirement of the planning scheme to compensate for the loss of vegetation through the planning approval process. Legislative requirements are specified by DEECA (Victorian Department of Energy, Environment and Climate Action).</p>   |
| Funding     | Developers in Cardinia Shire and implemented by Council officers  |
| Update      | <p>Council currently manages six offset sites located within Council bushland reserves in Pakenham and Beaconsfield.</p> <p>Maintenance budgets have been provided through Council's Native Vegetation Developer Contributions Fund, which is spent on engaging bushland contractors to implement the actions outlined in the site specific 10-year offset management plans.</p> <p>Such actions involve the protection of existing vegetation and enhancement planting, weed control, litter collection and photo point monitoring. Annual reports are produced for each site, detailing the actions taken throughout the year and the status of key indicators like weed coverage, tree coverage, organic litter and new and emerging weeds.</p> <p>Implementation of the offset management plans are due for completion in 2027-28 after which time the sites will default to ongoing maintenance under Council's annual works program and absorbed within existing budgets.</p> |

### **Responsible pet ownership**

|             |   |
|-------------|---|
| Description | <p>Roaming cats and dogs can have a significant impact on the safety of our native wildlife. Council is developing a suit of engagement tools to support messaging around compliance with local dog on-leash and cat curfew laws.</p>   |
| Funding     | This program is fully funded by Council   |
| Update      | <p>To assist residents understand their obligations under the cat curfew and dog on leash local laws, officers have developed two DL flyers (one for cats and one for dogs) that will be included with new pet registration confirmation letters.</p> <p>In the winter edition of Connect, a call out was made for stories about local indoor cats, and some of these have been profiled in the Spring edition.</p> <p>The next stage is to undertake activities in areas of particular significance such as Koo Wee Rup, focusing on the protection of the southern brown bandicoot.</p> |

**Pepis land - willow control and habitat restoration**

|             |  |
|-------------|--|
| Description | Willow control and habitat restoration project at Pepi's Land, Emerald   |
| Funding     | This project is funded by Council.   |
| Update      | <p>As identified in the Pepi's Land Wetland Management and Ecological Restoration Plan, willows are listed as a very high priority for control. Past efforts have resulted in the treatment of several mature willow trees, but much work is still to be done. The area is devoid of indigenous canopy and the control of willow will allow for the revegetation of the area to increase the biodiversity and habitat value of the site.</p> <p>Salix cinerea (Grey Sallow) and Salix sp. (Willow), are deemed weeds of national significance (WONS) and listed as declared noxious under the Catchment and Land Protection Act 1994.</p> <p>Council has engaged a specialist arboriculture contractor to undertake a staged program to control the willow, predominantly located at the northern section of dam one. The willows will first be poisoned by drilling at the base. The second stage will involve selective removal of poisoned willows to make way for further indigenous planting. Large willow trees will be habitat pruned to allow them to remain in situ. Some larger log wood will be strategically placed as ground habitat, while the remaining stems and branch material will be chipped.</p> <p>The area will be prepared for a larger scale, staged indigenous revegetation project to provide habitat and improve biodiversity values.</p> <p>Johns Hill Landcare have been consulted regarding this project and are supportive. They will also be seeking external grant opportunities to further support Council's efforts in the restoration of the site.</p> <p>Temporary signage has been installed on site to inform the community.</p> |

**Peri Urban Weed Management Partnership**

|             |   |
|-------------|---|
| Description | <p>The Peri-urban Weed Management Partnerships (PWMP) program provides \$4 million of funding from 2021- 25 to protect native plant and animal species in Melbourne's peri-urban areas from high-risk weeds.</p> <p>Council and project partners allocation is \$306,000 over the life of the program.</p>  |
| Funding     | This program is jointly funded by Council, the Victorian Government's Department of Energy, Environment and Climate Action with contributions from other program partners, including in-kind contributions.   |
| Update      | <p>Council is the lead agency and supports project partners to deliver weed management across approximately 330ha of public land. Project partners include Parks Victoria and Cardinia Environment Coalition. The Program supports Councils management of Beaconsfield Flora and Fauna Reserve, Stoney Creek Reserve and Brennan's Reserve, employs a project facilitator and builds stronger connections with traditional landowners.</p> <p>In 2022-23 (last year) weeds were controlled across 36 hectares of Council land, an additional 9 hectares of weed control was completed on project partner sites. Throughout the year more than 80 volunteer hours were attributed to weed control and the community contributed 260 hours to education and engagement activities such as participating in biodiversity monitoring, attending guided walks, citizen science activities and receiving presentations on Council's biolink plan.</p> <p>In 2023-24 (this year) the program will continue on ground weed control works, with a focus on increasing community participation and managing environmental threats at Council project sites.</p> |

**Biodiversity education**

|             |  |
|-------------|--|
| Description | <p>Over the past couple of months, Council officers have delivered a number of events and activities to engage the community in our unique biodiversity including:</p> <ul style="list-style-type: none"> <li>• Trees for Weeds</li> <li>• Citizen science walks at Guys Hill Reserve and Back Creek Reserve, Maryknoll</li> </ul>   |
| Funding     | These programs are fully funded by Council   |
| Update      | <p>Council and Friends of Emerald Lake Park held the annual Trees for Weeds swap at Emerald Library on Saturday 2 September. Residents supplied over 40 different weed species for identification and control advice from the Friends group volunteers and Council staff. In exchange, landholders chose plants from a wide range of indigenous tube stock to take home and plant in their gardens.</p> <p>As part of biodiversity month, on Saturday 9 September Council officers led a citizen science walk at Guys Hill Reserve. 15 people attended and were shown how to upload flora sightings onto 'iNaturalist' on their smart phones. The event was also used to increase membership for the Friends of Cardinia Creek.</p> <p>On Saturday 23 September Council officers led a citizen science walk at Back Creek Reserve in Maryknoll. 15 people attended, learning more about the area's orchids, bats, birds, eucalypts and tree hollows, and practicing using 'iNaturalist'.</p> |

## ***Climate change***

Council Plan initiative

- Implement initiatives in the *Aspirational Energy Transition Plan*

This section also includes projects that are run by South-East Councils Climate Change Alliance (SECCCA), of which Cardinia Shire is a partner.

### **Improving household energy efficiency**

|             |  |
|-------------|--|
| Description | <p>To support residents to improve their household energy efficiency and save money on their power bills, a set of energy audit kits have been donated to Myli libraries.</p> <p>Council has delivered a series of presentations/discussions to support vulnerable members of the Cardinia Shire community to cope with winter energy costs.</p>   |
| Funding     | The energy audit kits provided to libraries within the shire, and information sessions were funded by Council.   |
| Update      | <p>As part of a collaboration with Myli libraries, Bass Coast, Baw Baw and South Gippsland Shire councils, every library across the Myli network now has a home energy audit kit in the catalogue for residents to borrow. The fifteen kits have been available to reserve since mid-August, and as of mid-September each kit had been borrowed once or twice and there were 36 reservations.</p> <p>As a launch activity for the energy audit kits, Council delivered an exploratory session as part of Pakenham Library's STEAM club for 6-12 year olds and their parents. The children had fun exploring temperature differences and parents had lots of great questions.</p> <p>Two 'saving money on your energy bills' information sessions were delivered at Outlook and Beaconsfield Community Complex and advertised through Council's Ageing Well newsletter. Four sessions have also been delivered to Council's supported playgroups. Discussions have been productive and feedback positive.</p> |

### **New solar system at Operations centre**

|             |   |
|-------------|---|
| Description | The installation of a 40kW solar energy system at Council's Pakenham operations depot. The system is installed on a large truck shed that was reinforced to ensure it could support the solar energy system. As part of the works, cables were run in an underground trench from the truck shed to the main administration building at the depot, which the solar energy system supplies. The solar energy system will save approximately \$9,000 per annum in electricity costs. |
| Funding     | This project is fully funded by Council.  |
| Update      | The system has been installed and is fully operational.   |

**Flower Street unit heat pump installation**

|             |  |
|-------------|--|
| Description | The replacement of 5 old inefficient hot water systems at Flower Street senior housing units in Pakenham with energy efficient electric heat pumps. This project will reduce energy costs for residents and environmental impacts. |
| Funding     | This project is fully funded by Council  |
| Update      | The systems are installed and operational.   |

**Victorian Energy Collaboration (VECO) results for Council**

|             |   |
|-------------|---|
| Description | Council is proud to be one of 51 Victorian councils to sign on to and purchase renewable electricity via the Victorian Energy Collaboration (VECO), the largest emissions reduction project ever undertaken by local government in Australia.   |
| Funding     | Electricity expenses are funded by Council's operational budget.  |
| Update      | <p>Council's operations, including streetlights, libraries, children's and community centers, are now powered by 100 per cent renewable electricity. VECO is estimated to have reduced Council's greenhouse gas emissions by approximately 5,500 tonnes of CO<sub>2</sub>e and its electricity costs by an estimated \$90,000 last financial year (2022-23).</p> <p>The VECO project is essential to achieve Council's goal of net zero Council emissions by 2024 as outlined in the Aspirational Energy Transition Plan.</p> |

## ***Heritage***

Council Plan initiative

- Actively protect key heritage sites within the shire

### **Heritage grant program**

|             |   |
|-------------|---|
| Description | Council's heritage grant program has recently been through a thorough review to ensure it is meeting community needs.   |
| Funding     | This grant program is fully funded by Council   |
| Update      | <p>Over the last couple of years, the number of applications to Council's heritage grant program have slowly been reducing. Council officers have undertaken a thorough review of the program, including eligibility criteria, the amount funded per project and quotation requirements.</p> <p>Following the review, the grant program was relaunched to include all places of heritage value that are covered by a heritage overlay in the Cardinia Shire Planning Scheme, including private residences. Emphasis has also been placed on funding to help maintain significant trees or hedges that are located on private property and have a heritage overlay.</p> <p>The updated grant program was opened for applications on 3 April and closed 30 June 2023. Four applications were received:</p> <ul style="list-style-type: none"> <li>• replacement of an original veranda</li> <li>• pruning and remedial works to a significant school hedge</li> <li>• works at Mallow House Kooweerup Historical centre to allow better access to historical records and material for the community</li> <li>• replacement of an original church fence</li> </ul> |

### **Emerald Museum school holiday activity**

|             |   |
|-------------|---|
| Description | Free school holiday activity held at Emerald Museum to attract new and different visitors to the museum.  |
| Funding     | This activity was funded by the Emerald Museum Community Asset Committee  |
| Update      | <p>The Emerald Museum hosted two one-hour terracotta pot painting sessions as a homage to the history of the Nobelius Nursery and Nobelius Heritage Park. A total of 26 participants aged between 5-12 years attended on the day; the vast majority came from Cardinia Shire and City of Casey, and many were first-time visitors to the Museum.</p> <p>Each child went home with a painted terracotta pot complete with a marigold plant.</p> <p>Exceptionally positive feedback was received on the day, with a common thread commending the welcoming and inclusive atmosphere and fun, mindful painting activity.</p> |



**Water**

Council Plan initiative

- Implement initiatives in the Integrated Water Management Plan

**Emerald Lake Park – Lake Treganowan bank stabilisation works**

|             |  |
|-------------|--|
| Description | Bank stabilisation is required to ensure the banks of the lake are stabilised for conservation of mature tree species, visitor safety and environment amenity. The works included: <ul style="list-style-type: none"> <li>• flora and fauna assessment to find safe access location for machinery</li> <li>• creating a geofabric and rock access track for machinery to protect existing garden beds</li> <li>• traffic management to ensure continued access to the car park and pedestrian safety</li> <li>• Aligning large rocks along the eroded bank to create a toe structure for refill with smaller rocks</li> <li>• embankment reinstated with top soil and seeded with grass</li> </ul> |
| Funding     | This project was fully funded by Council   |
| Update      | <p>Lake Treganowan was constructed (along with the swimming pool, caravan park, kiosk and much more) when the new park was officially opened in 1941. The lake and its surrounds remain a popular tourist attraction and is an important early feature of the park. To ensure it continues to provide primary significance to the heritage value of the park, bank stabilisation works were required.</p> <p>The project was planned with relevant stakeholders and community groups.</p> <p>The works were completed in early September, just in time for the Puffing Billy Running Festival.</p>   |

**Beaconsfield Community Complex - rainwater harvesting**

|             |  |
|-------------|--|
| Description | The installation of a rainwater harvesting system at the Beaconsfield Community Complex.   |
| Funding     | This project is fully funded by Council.   |
| Update      | Two 5,000 litre rainwater storage tanks have been installed and connected at the site. Pipework has been adjusted and a pump installed to provide rainwater to the toilets and outdoor taps. The system is currently undergoing final commissioning. |

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

Council Plan initiatives

- Implement the action plan for the Waste and Resource Recovery Strategy

### **Waste related community events**

|             |   |
|-------------|---|
| Description | <p>Council hosts several community presentations/events to engage and educate the community about Council waste services, resource recovery, and waste avoidance.</p> <p>These events/presentations are organised in line with several action items in the Waste and Resource Recovery Strategy, particularly action 14 "Provide education to promote correct kerbside service use, including correct sorting and presentation behaviour and any emerging policy changes."</p>  |
| Funding     | These community presentations and events are fully funded by Council's garbage charge.  |
| Update      | <p>Between July and September 2023, the following community presentations and events were organised to help educate residents on waste avoidance, recycling and recovery:</p> <ul style="list-style-type: none"> <li>• Plastic free July 2023 <ul style="list-style-type: none"> <li>- Static display at Pakenham Library for the month of July to promote reusable alternatives for single-use plastic items- 10- 31 July 2023</li> <li>- Pop-up stall at Pakenham Marketplace- 20 July 2023</li> </ul> </li> <li>• Pop- up stall for school engagement as part of Principal's health and wellbeing breakfast forum. The event is organised by Monash Health to engage up to 80 school principals and delegates in the City of Greater Dandenong, City of Casey and Cardinia Shire to promote free council services- 23 August 2023</li> <li>• Emerald Probus group - Community presentation</li> <li>• Waste Q+A with Koo Wee Rup Health Service environment committee</li> </ul> |

### **Upcycle your clothing workshop**

|             |  |
|-------------|--|
| Description | <p>The Cardinia Cultural Centre run programs and workshops for school-aged kids throughout the school holidays. In collaboration with Council's waste team, one of the September school holiday programs focused on upcycling old clothing. The session demonstrated simple ways to refresh old clothing and create new and fun fashion items, using things many of us have at home. In addition to promoting creativity, this activity also helps save items from being sent to landfill, by encouraging residents to look at 'waste' differently and perhaps consider how it could be repurposed into a creative fashion project instead.</p>  |
| Funding     | This project was fully funded by Council's Garbage charge.   |
| Update      | <p>Council's waste team partnered with the Cardinia Cultural Centre to run a school holiday workshop focused on upcycling old clothing. The session was facilitated by up-cycling fashionista and costume designer Sarah Seahorse.</p> <p>The participants learned useful tips, tricks and practical skills to help them transform pre-loved clothing into amazing new outfits, headwear and accessories. Sarah brought several creative examples to inspire attendees and demonstrated some basic sewing, cutting and decorative techniques with different types of clothing. The session also focused on textile waste, the impacts of landfill and the life cycle of a piece of clothing.</p> |

**July/September green waste drop-off results**

|             |  |
|-------------|--|
| Description | <p>Council conducts regular green waste drop-off events for Cardinia Shire residents throughout the year as part of Council Plan strategy 3.2 <i>'actively move towards zero waste through increasing recovery and reuse'</i> and Council's Waste and Resource Recovery Strategy action 11 <i>'provide alternative options to reduce burning off'</i>.</p> <p>Six events were organised for 2023, evenly spread through the year and ensuring they cover the summer period to reduce bushfire risk in the shire.</p>   |
| Funding     | The project is fully funded by Council's garbage charge  |
| Update      | <p>Council's third and fourth green waste drop-off events for 2023 were held in July and September at Future Recycling Transfer Station, Pakenham. To improve participation rates, digital variable message signs (VMS) were installed at key locations for the events.</p> <p><b>July event</b><br/>This was the third event for 2023 and was held for four days in Pakenham on 21- 24 July, attracting 398 vehicles. The event diverted 67.50 tonnes of green waste material from landfill or open air burning at a total cost of \$13,791.25 inc GST. The event was one of the busiest winter green waste drop-off events since launching the program.</p> <p><b>September event</b><br/>This was the fourth event for 2023 and was held for four days in Pakenham on 1-4 September, attracting 345 vehicles. The event diverted 75.88 tonnes of green waste material from landfill or open air burning at a total cost of \$15,127.86 inc GST.</p> <p>Facilitating residents to remove this material from their properties helps reduce the need to burn off organic fuel and assists in reducing the fire risk in these areas.</p> <p>Newspaper advertisements have been booked to improve participation for the remaining events. The remaining events for 2023 and in the lead up to summer are:</p> <ul style="list-style-type: none"> <li>• Lysterfield - Friday 13 to Monday 16 October</li> <li>• Pakenham - Friday 1 to Monday 4 December</li> </ul> |

**Textile drop off event results**

|             |   |
|-------------|---|
| Description | <p>In 2022 Council hosted its first Clothing drop-off event, partnering with the Australian Red Cross. Residents were able to donate clothing, homewares, bric-a-brac and other quality items to help raise funds for Australian Red Cross programs.</p> <p>The event attracted more than 120 cars on the day and Council received over 3000kgs of donations.</p> <p>While this event was seen as a success, there were already avenues for residents to donate quality items throughout Cardinia Shire. So rather than redirecting items that would have otherwise been donated to local op-shops and charities, Council decided to run a similar event but with a different purpose.</p> <p>The 2023 event has been setup to collect end-of-life textiles that were too old or damaged to be donated to focus on diverting textiles from the rubbish bin and landfill, and instead redirecting them to Textile Recyclers Australia to be turned into new fabrics for reuse.</p>   |
| Funding     | This project was fully funded by Council's Garbage charge.  |
| Update      | <p>The 'Textile drop-off' event was the first of its kind held in the shire and focused on collecting 'end-of-life' clothing and textiles that would have otherwise ended up in landfill. The textiles collected on the day are processed by Textile Recyclers Australia (TRA) in an innovative 'fibre to fabric' process that breaks down old fabric and textiles into fibres so they can be re woven into new material and reused in clothing production.</p> <p>171 residents attended the drive-thru event at IYU Reserve in Pakenham and over 2,870.4kg of clothing and textiles were dropped off for recycling. Council partnered with TRA to help run the event and received a lot of positive feedback from residents regarding the ability to save old clothing and textiles from landfill as well as convenience of a drop-off event like this.</p> <p>This event aligns with the Waste and resource recovery action plans objective 9 (shire-wide education on waste minimisation) and objective 10 (support the Victorian Governments goal to divert 72% of waste from landfill by 2025).</p> |

**Internal waste audit**

|             |   |
|-------------|---|
| Description | <p>Council conducted a bin content composition audit on the bins from Civic Centre office (site 1) and the depot (site 2). The audit was performed at the depot (18 Purton Road) between 26-30 June on all waste streams (rubbish, recycling, and food and garden waste). An external supplier (EC Sustainable) was engaged to perform the audits.</p> <p>The purpose of the audit was to investigate the characterisation of current waste streams, plan for future services and facilitate improved education and engagement with staff.</p> <p>The audit was conducted to support Waste and Resource Recovery Strategy action 20 "<i>Continuous staff engagement on waste reduction and recovery topics</i>" and action 22 "<i>Promote opportunities to implement circular economy principles across Council</i>".</p>   |
| Funding     | The project was fully funded by Council's garbage charge.   |
| Update      | <p>Council performed the audit for one week in winter 2023, during June between 26-30 June. The last composition audit on office bins was performed in 2016 hence this audit provided the baseline data to improve waste education and staff engagement. Following findings were recorded in the audit report:</p> <p><b>Generation and contamination rate</b></p> <ul style="list-style-type: none"> <li>• Civic Centre <ul style="list-style-type: none"> <li>- Rubbish- 200.36kg (or 0.55kg/ FTE/ week) bin content generated per week with 43% recyclables and 33.7% FOGO material.</li> <li>- Recycling- 59.68kg (or 0.16kg/FTE/week) bin content generated per week of with 11.2% contamination.</li> <li>- FOGO- 25.49kg (0.07kg/FTE/week) bin content generated per week with 28.6% contamination.</li> </ul> </li> <li>• Depot <ul style="list-style-type: none"> <li>- Rubbish- 12.4kg waste generated per week with 14.5% recyclables and 70.8% FOGO material.</li> <li>- Recycling: 3.08kg bin content generated per week with 37.6% contamination</li> <li>- FOGO: FOGO bins not in use at the Depot during audit period.</li> </ul> </li> </ul> <p><b>Diversion rate</b></p> <ul style="list-style-type: none"> <li>• Civic Centre: <ul style="list-style-type: none"> <li>- Current diversion rate is 25.0%</li> <li>- Potential diversion rate to reach 79.0% if all unrecovered recyclables and FOGO material was recovered properly.</li> </ul> </li> <li>• Depot: <ul style="list-style-type: none"> <li>- Current diversion rate is 12.4%</li> <li>- Potential diversion rate to reach 80.7% if all unrecovered recyclables and FOGO material in waste stream is recovered.</li> </ul> </li> </ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>• Council will deliver education projects to reach the potential diversion rates by focussing on: <ul style="list-style-type: none"> <li>- Waste separation at the source through staff education and engagement</li> <li>- Encouraging FOGO recovery at the depot</li> <li>- Staff education on the main contaminants, avoidance, and recovery of material</li> </ul> </li> </ul> <p>Organising internal events to promote recycling and waste recovery.<br/>Results of the audit will be used a benchmark for future audits, to educate users of the buildings on correct waste disposal, to improve recovery rates and to help plan for future services including new waste streams.</p> |

***What is coming up?***

- National Recycling Week 2023 (November)- Internal staff education and external events
- Clothing swap in November (18 November)
- 'Storytime with a truck driver' - Thursday 23 November 11:15am at Emerald library
- Christmas cardboard drop off

For more upcoming events, please subscribe to Council's environmental newsletter – Down to earth  
[www.cardinia.vic.gov.au/downtoearth](http://www.cardinia.vic.gov.au/downtoearth)