

6.2 Activity Reports

6.2.1 Environment Quarterly Report

Responsible GM: Peter Benazic

Author: Desiree Lovell and Jacqui Kelly

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 Assets and Services Division, the vast majority 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 2020–21 under the key performance area of Environment 'we will continue to plan and manage the natural and built environment for present and future generations'.

Project update

Projects and updates are included in the attached report.

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.

Cardinia Creek - peri-urban weed management partnership

Description	The Peri Urban Weed Partnership (PUWP) project is an initiative of the Victorian Department of Environment, Land, Water and Planning (DELWP) in partnership with Cardinia Shire and other agencies including Parks Victoria, Melbourne Water, Vic Roads and Cardinia Environment Coalition (CEC). Other stakeholders include environmental groups.	
	The key objective of this 4-year project was to achieve effective control of environmental weed species that are invading high value bushland reserves within the Cardinia Creek corridor.	
	Now in its eighth year, this project continues to protect the creek habitat from the various threats, including weeds, surrounding urban growth and just recently pest animals.	
Funding	This partnership project is jointly funded by Council and DELWP, along with contributions by other agencies.	
Update	An additional \$102,000 of funding has been made available to extend this project to October 2021. These funds will be distributed amongst project partners for weed control, community engagement including treating weeds on private land, and for the first-year pest animal monitoring is to be included.	

Environmental education at Deep Creek Reserve

Description	Ecolinc is a Victorian Government science excellence centre who provide environmental science excursions at Deep Creek Reserve. Ecolinc have recently partnered with PrimeSci from Swinburne University at Deep Creek Reserve.
Funding	Ecolinc is funded by the Victorian Government
Update	Ecolinc have successfully provided environmental science excursions at Deep Creek Reserve for one year. In 2020, their excursions were run virtually due to COVID-19 restrictions. They have now recommenced onsite excursions.
	Their initial programs have focused on frogs, native plants and wetland function for primary school children. Recently Ecolinc has partnered with PrimeSci to broaden the science offerings at Deep Creek Reserve. PrimeSci is a science education organisation run by Swinburne University that provides science, technology, engineering and mathmatics (STEM) education school excursions and school holidays programs to increase children's curiosity and understanding of all science topics.
	Schools can now book excursions for both Ecolinc and PrimeSci through the Ecolinc booking system. PrimeSci will be providing science excursions at Deep Creek Reserve focusing on chemistry, physics and healthy rivers.

Working for Victoria: weed management

Description	Working for Victoria crew reducing weeds at Emerald Lake Park, focussing on high threat weeds.
Funding	Working for Victoria is a Victorian Government initiative
Update	The Working for Victoria crew has been working at both Pepis Land and Emerald Lake Park (ELP), removing and treating weeds. At ELP a sycamore removal project has been undertaken, complimenting the works of the Friends of ELP with their "sycamore blitz" The WFV crew will increase from 7 to 10 in April, with the appointment of three additional staff. The WFV crew's next project will be revegetation works at Pepis Land, ELP and Bunyip Streamside Reserve.

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.

Civic Centre solar

Description	The installation of a 75kW solar energy system (approximately 200 panels) on the Officer Civic Centre to reduce energy costs and environmental impacts. The system will save Council approximately \$22,000 per annum in energy costs.
Funding	This project is funded by Council
Update	Quotations have been received and installation works are intended to be completed by the end of financial year.

Solar system inspection and cleaning program

Description	Council now has solar energy systems on 35 buildings and a regular program of cleaning and inspections has been developed to manage this.
Funding	This initiative is funded by Council.
Update	Cleaning solar panels helps to ensure their energy production is not reduced due to dirt and dust. It is also important the condition of solar energy systems is periodically inspected to identify any issues that need to be addressed.
	In February 2021, solar panels were cleaned and inspected at the Emerald Museum and Pakenham Main Street kinder. In late 2020, cleaning and inspections took place at 11 sites across the shire. Solar energy system maintenance requirements are being reviewed to include more systems and strengthen maintenance activities.

Heritage

Conservation management plan development for Council facilities

Description	Council is currently working with both the Yannathan Hall Committee of Management and the Lang Lang Historical Society (former MCHC building) to develop conservation management plans for each of these heritage listed sites.
Funding	This project is fully funded by Council
Update	A heritage conservation management plan involves researching the chronological history of the site since establishment. The plans will include a detailed summary of the original elements of the buildings to guide all future management and maintenance works for both the committees and Council. Site visits and meetings with both community groups have commenced. A draft chronological history of both sites has been given to the committees for feedback and comment.

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

Westernport aquifer storage and recovery

Description	Council is partnering with Melbourne Water, DELWP, South East Water and Casey Council to carry out a technical feasibility study to identify Aquifer Storage and Recovery (ASR) opportunities in the region.
	The project involves research, planning and design of aquifer storage and recovery options for the improved management of stormwater and groundwater in the Westernport Catchment.
	Aquifer storage and recovery is the direct injection of surface water such as stormwater into an underground aquifer for later recovery and use.
Funding	This project is jointly funded by DELWP (\$120,000), Melbourne Water (\$50,000), City of Casey (\$10,000), South East Water (\$10,000) and Council (\$10,000)
Update	The study will provide: an understanding of ASR opportunities in the region valuable insight into hydrological processes in an area experiencing rapid urbanisation with potential recharge options

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.

Recycling audit

Description	Council commissioned Tandem Solutions Pty Ltd to conduct a physical audit of a sample of materials collected from the kerbside recycling stream.
	The audits were conducted during the period of Monday 22 February to Friday 26 February 2021. They consisted of a physical audit of an approximate 2m³ sample (average weight of 135kg) from six kerbside recyclables collection vehicle loads per day, over five days. Samples were taken from 30 trucks in total.
Funding	This initiative is fully funded by Council through the garbage charge.
Update	Based on the results of these physical audits, the average composition of Council's kerbside recycling is: • recyclables – 72.21% by weight • total contaminants - 27.79% by weight Contamination has increased by 16.67% since our last audit in November 2018, which saw total contaminates at 11.12% by weight. This increase may be due to the national recycling crisis in 2019, which saw lots of negative media coverage for the recycling industry, closure of our recycling processor, recycling been diverted to landfill for several weeks, new processor and change of acceptable items (no more soft plastics) and impacts from covid-19 as more people were at home, household waste increased. The top contaminants identified in the audit include bagged waste, bagged recyclables, soft plastics and textiles. The waste team will continue to work hard to educate the community and decrease contamination levels over the next 12 months.

Clean up Australia Day

Olouii up / tu	Dicali up Australia Day	
Description	Sunday 7 March 2021 was Clean Up Australia Day, the national day encouraging individuals and community groups to come together to clean up and conserve our environment through litter collections.	
	Clean up Australia provides information and equipment; including gloves and bags, to registered clean up events, on this day and any time of year.	
	Council recognises the benefit to our environment and community when residents volunteer to clean litter in public places. To support the community, Council provides a free removal of collected litter and loaning litter pickers when requested. This can be arranged any time of year by contacting Council.	
Funding	Both Council and Clean Up Australia support this initiative.	
Update	Nineteen sights were registered across Cardinia Shire for Clean Up Australia Day 2021. This included two businesses (including Cardinia Shire Council's waste team), seven schools/youth organisations and 10 community groups.	
	Results from 15 sites saw approximately 164 bags of litter collected plus five trollies, three tyres, one sign and several other bulky items. A total of approximately 24.5 cubic meters of rubbish collected and removed from our community.	
	A big thankyou to everyone who participated this year, the waste team will continue supporting and encouraging the community to Clean Up Australia all year round.	

Cleanaway contamination education

Description	Council has been working closely with our waste contractor Cleanaway to reduce kerbside contamination across the shire. Our fleet of 16 new waste trucks feature technology such as 360-degree cameras and GPS technology, allowing drivers to track contamination during their collections. This technology has helped us trace contaminants back to individual households and inform and educate residents about the contamination and how to avoid it in future.
Funding	This initiative is supported by both Council and Cleanaway
Update	Between January and mid-March, the drivers have reported 1,110 households using their bins incorrectly. Drivers flag the address in the Cleanaway system, put a sticker on the bin and an education letter is sent to the resident. Most of these reports are due to recycling bins containing plastic bags and general household rubbish. Bins belonging to households with ongoing issues, will be checked by the driver prior to emptying and rejected if the issue is still present after three warnings.
	Contamination is a big problem because it results in higher processing fees, makes sorting and recycling material extremely difficult, increases our waste sent to landfill and poses a risk to the workers and equipment during processing.

Green waste drop-off

Description	Free Green Waste drop-off days are held at two transfer stations in April-May and October-November each year. They allow residents the opportunity to drop-off garden material for free, helping to reduce reliance on burning off and reduce fuel loads on property, as per the Waste and Resource Recovery Strategy Action Plan. The green waste is transferred to composting facilities and becomes compost that is sold commercially.
Funding	This service is funded by Council through the garbage charge.
Update	Two green waste drop-off events were held in November/December 2020, at Lysterfield Resource Recovery Centre and Future Recycling Pakenham. The original dates for these events were booked and advertised for October, however due to ongoing extensions to COVID-19 stage 4 restrictions they were reschedule to Nov/Dec.
	These events had the highest number of residents and largest volume of green waste dropped off in comparison to all the previous drop-off events organised by council: 492 drop-offs in total, 111.66 tonnes of material, costing \$19,781.

Working for Victoria: clean up and education

_	
Description	In January 2021, an additional five team members joined the Waste team through the Working for Victoria program, doubling the team size during the six-month program. These additional resources will enable increased community presence, engagement and education, conduct service analysis, auditing, and cleansing of parks and public spaces.
Funding	The Working for Victoria program is funded by the Victorian Government.
Update	 During the first two months the Working for Victoria team members have assisted with the following: Hard Waste education Proactive audits of booked collection areas to identify unbooked presentations (copycat behaviour). Educating residents who are unaware of the changes to the hard waste service or are using the service incorrectly. Residents with an unbooked pile are provided with the hard waste guide, outlining the correct process and the pile is tapped with our dumped rubbish tape. This has been remarkably successful with quick action taken by most residents - unaware they did the wrong thing. Green bin education Acceptable item stickers are being applied proactively to bins that are presented for green waste collection. Reminding residents of the new service and what can and cannot go in the green bin. Litter picking Areas of community concern are being targeted for a litter collection on a regular basis. Public place bin audits Bins at active reserves have been audited to verify the completion of hot washing program by the contractor. Dumped rubbish inspections Reports of dumped rubbish are being inspected for illegal rubbish dumping. Piles are tagged with dumped rubbish tape and a dumped rubbish postcard are dropped off at nearby properties. Local real estate agencies Delivered 1500 waste guides to 26 local real estate agencies to be included in welcome packs for new tenants and residents moving to the area. Recycling contamination To be implemented in conjunction with Cleanaway, targeting areas where recycling c