

9 ENVIRONMENT QUARTERLY REPORT

FILE REFERENCE INT1776841

RESPONSIBLE GENERAL MANAGER Michael Ellis

AUTHOR Desiree Lovell

RECOMMENDATION

That the report be noted.

Attachments

Nil.

EXECUTIVE SUMMARY

This report provides a summary of some key environmental sustainability projects currently being undertaken by Council. Projects have been categorised according to the Sustainable Environment Strategy themes:

- Climate change and energy conservation
- Development and built environment
- Water conservation
- Waste minimisation and sustainable procurement
- Natural systems

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 environmental actions taking place throughout the organisation. While many of these occur within or are led by the Environment Unit, 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 2017-18 under the key performance area of Environment 'we will continue to plan and manage the natural and built environment for present and future generations'.

Climate change and energy conservation

1. Residential scorecard assessment

The Residential Scorecard Assessment is an Australian-first home energy rating program. The star rating is an assessment of a home's building shell and a representation of the running cost of the fixed appliances. Many Victorian homes have high energy bills simply due to the way the home is built. The Scorecard assessments help householders understand and improve the performance of their homes by providing them with guidelines towards improving their homes energy efficiency and an energy star rating.

Council working in partnership with the South East Councils Climate Change Alliance (SECCCA), has supported nine residential energy efficiency assessments. The scorecard assessment aims to raise

awareness about residential energy efficiency, promoting energy efficient residential dwellings and reducing household energy consumption in the Shire.

2. *Climate change resilience - ARUP Pakenham PSPs*

Through collaboration with the Enliven Group, Council has secured access to climate change resilience consultants, from the ARUP Group, at no cost to Council. The consultants provided feedback to support integrating climate change resilience into future design considerations. The Pakenham East and Pakenham South Precinct Structure plans were identified as suitable documents for the intended analysis. The feedback included design considerations, such as maintaining the free passage and temporary storage of floodwater to minimise flood damage and integrating increased shading while minimizing hard surfaces that absorb temperature, to actively reduce urban heat island effect in the growth corridor.

Development and built environment

3 *ESD matrix*

In 2013, Council engaged WSP Parsons Brinckerhoff to develop a tool to generate prescriptive Ecologically Sustainable Design (ESD) requirements for new council buildings. The tool allows council officers to input key variables of building projects, which then determine the ESD initiatives deemed appropriate for the development based on present logic.

SECCCA has now engaged WSP Parsons Brinckerhoff to update, expand and enhance this ESD matrix by the end of 2017. Council's ESD tool is being expanded and updated at a regional level, allowing for its use by all SECCCA member councils and ultimately all Victorian councils. This project developed through discussions about our ESD tool with other councils, who saw the benefits of updating it and making it available at a regional level. This initiative has advanced Cardinia's recognition as a regional leader in sustainable building design.

4 *Civic Centre school tour - sustainable building design*

St Margaret's School in Berwick participated in a tour of the Civic Centre as part of the Year 8 student's introduction to sustainable building design and sustainable housing. Prior to taking the tour of the Civic Centre, the students were shown a presentation showcasing the various sustainable building design features of the Civic Centre, Council initiatives for emissions reductions and the solar projects across the Shire. As part of the tour, the students also visited a sustainable design information centre in Parklea, where a SECCCA representative guided the group through the centre and the various elements that support sustainable design and the operational building efficiency.

5 *Emerald Library solar*

The installation of a 22.8kW solar photovoltaic system on the Emerald Library aligns itself with Aspiration energy transition plan (AETP) and supports Council's transition towards renewable energy. The system consists of 76, 300-watt high efficiency solar panels. A display screen is also being installed in the library foyer that will demonstrate the energy being produced from the solar system and the benefits it is providing. The system will produce approximately 30,000 kWh of electricity per annum and will reduce emissions by approximately 33 tonnes of CO₂e per annum, the same annual emissions as produced by 8 average cars per annum. The system includes the 1000th solar panel installed on a Cardinia Shire Council owned building.

Water conservation

Council Plan action – Plan to manage water in an integrated manner, including the reduction of potable water consumption by Council and households.

6 *Completed drainage works*

The first stage works on Lake Treganowan, including construction of a pervious wall to assist in sediment dropout has been completed and was funded by Melbourne Water Living Rivers fund.

An application to the Living Rivers fund will be made to apply for the second stage of Emerald Lake Park desilting and formal sediment pit construction. Stage two will be the second inlet in Lake Treganowan near the café, this one does not require a formal wall but will require some formal shaping. The silt will be removed and stored out of site to dry. The site will be shaped and planted to achieve the ultimate design, reducing sediment and silt levels massively and assisting in nutrient removal.

Waste minimisation and sustainable procurement

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

7 *Green waste drop-off*

The draft Waste and resource recovery strategy (2018-27) (WRRS) outlines that there has been a significant reduction in the amount of burning off in the shire since 2010, in accordance with the objectives of Council's open air burning policy to reduce air pollution and greenhouse gases. To support this policy, the draft waste and resource recovery strategy proposed that Council would, along with other measures, *'trial green waste drop off option for residents at two transfer stations'*

Council is trialling a new free green waste drop off service for residents in November. The service will be offered over a 10 day period from 11–19 November and will only be open to residents of Cardinia Shire (but not commercial businesses). Photo ID will need to be shown at the time of drop off.

There will be two drop off locations available, offering a 9am–4pm drop off:

- Pakenham Resource Recovery Centre
- Lysterfield Resource Recovery Centre

8. *Hard waste record recovery rates*

Council can be delighted with the results of the May - June biannual green and hard waste service, which achieved a 29.1 per cent recovery rate (recycling). This is an increase from a long term average of around 10 per cent. This was achieved through the introduction of the new recycling streams of couch, television and computer recycling. Couch recycling was introduced in November 2016, and was another innovation for residents: being one of the first councils to offer kerbside recycling of couches within Victoria.

From next collection, Council will be promoting that all ewaste (anything with a lead) can be recycled at the kerbside, by placing it in a separate pile within the biannual green and hard waste service. This will make ewaste recycling available to all residents twice a year from the kerbside.

By recycling at this higher rate, we can save 700 tonnes of landfilled waste from the hard waste service each year, which is great for our environment. Waste should be left out in five piles:

- general hard waste
- scrap metal and whitegoods (recycled)
- mattresses and couches (recycled)
- bundled green waste (recycled)
- ewaste – (recycled)

The next service will run from 30 October until the 1 December.

9 *Use of recycling material within open space*

Council has been accepting soft plastics into the kerbside recycling bin since November 2016 and in that time we have found that approximately 23 per cent of households have been participating. We anticipate this figure will only increase over time as more people learn about the initiative and become more comfortable participating. The 'bags in a bag' are accepted by our recycling contractor, SKM recycling, and are sorted by hand, compacted, baled and sent to a plastic recycler either locally or overseas.

These renewed plastics are used as a raw product to make everything from outdoor furniture, bollards, decking and playground equipment to the wheelie bins ever present on our streets. Selection and installation of these materials are an important part of the recycling cycle. Council aims to incorporate the purchase of recycled plastic bollards and parks furniture into our public spaces wherever possible and hope to continue to increase the use of these products in the future. Examples of recent installations include the:

- park furniture at Bourke Park, Pakenham
- new exercise station along Toomuc Creek, Pakenham.

Natural systems

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.

10 *National Tree Day events*

Council staff attended two community National Tree Day events on Sunday 30 July. The events were held at Avonsleigh Common and Gembrook Park. A total of 25 community members attended the events, with approximately 550 plants, planted on the day.

11 *Weeds for trees day*

The focus of the weeds for trees event was to raise awareness of the negative impact that weeds have on the natural environment and offering help to identify weeds residents could bring to the event, with advice on best control techniques. Free trees were offered to those attending, to encourage weeds to be replaced with local indigenous species.

The event was organised by Council in conjunction with the Friends of Emerald Lake Park. Other groups such as Johns Hill Landcare Group, Friends of Wrights Forest and Emerald Star Bush Committee members also assisted. The day was a success with approximately 25 different weed species brought in by residents, and 250 indigenous plants given away.

12 *Outcome of biodiversity audit project*

A biodiversity audit has been undertaken to provide baseline data to assist with the development of both the Sustainable Environment Strategy and Biodiversity Strategy. The consultant used Council data, aerial imagery and on ground analysis to assess and map:

- tree canopy coverage
- analysis of eight priority threatened species
- extent of selected weeds
- analysis of vegetation on private property
- other vegetation assessments.

This information is valuable because the existing environmental data which is generated by the Victorian Government did not enable Council to make accurate strategic planning decisions.

The information will be added to Council's GIS mapping software. The report found that total tree cover in the Shire is 29 per cent (26 per cent north of the highway and 3 per cent south of the highway). Woody weeds cover in excess of 0.5 per cent of the Shire. The most environmentally profound result is that of the 55 different vegetation communities that are found within the Shire, 17 (31 per cent) have so significantly depleted that they are listed as 'endangered' in the state.

Also of note, is the incidence of the eight threatened species which were analysed in the report. The information reveals that there is an overlapping correlation between the selected forest species, north of the highway and the swamp species, south of the highway. This showed that to most efficiently protect these species, resources could be allocated along the break of slope i.e. Princes Highway area, outside of the growth corridor.

13 Update on Yellingbo conservation area project

The key focus of the Yellingbo Conservation Area Coordinating Committee (YCACC) has been providing guidance for the development of key documents such as the:

- community engagement plan
- the concept plan
- action plan

A Yellingbo Project Team has been formed within DELWP to work on actions that deliver the recommendations in the Victorian Governments response to the VEAC inquiry. The focus of these activities is currently liaising with stakeholders affected by the phasing out of grazing licences taking place between 2016 and 2018. The removal of grazing aims to protect natural values and enhance riparian habitat.

The Helmeted Honeyeater Recovery team, represented on the YCACC, continue to provide updates on the Helmeted Honeyeater and Lowland Leadbetter Possum captive breeding program outcomes. As a result of an investigation (early 2017) of potential short and long term release sites for the birds, an interim report has been drafted, highlighting various sites (including sites within Cardinia Shire), which have shown to contain appropriate habitat for the birds to live and breed, including vegetation for roosting, foraging, and nesting. At this stage, no decision has been made which sites will be chosen for release, both in the short or longer term, however it has been noted that whilst many sites may have potential as release sites, much of the vegetation needs to be supplemented with relevant plant species in order to create a denser, safer habitat for the birds. Feral animal control has also been highlighted as an issue needing addressing.

POLICY IMPLICATIONS

Nil.

RELEVANCE TO COUNCIL PLAN

Nil.

CONSULTATION/COMMUNICATION

Where internal and external consultation has taken place it is captured in the background information above.

CONCLUSION

Council's partnerships with community groups and other key stakeholders has resulted in fantastic outcomes for the environment within the Shire and highlights the need to continue to build on these relationships to provide long term sustainability to our environmental work.