# Wyndham City 2017-2018 State of the Environment Report Summary

Wyndham City Overview

Wyndham is one of Melbourne’s designated growth corridors and has one of the fastest growth rates in Victoria. The City of Wyndham’s population forecast for 2018 is 257,028 and is forecast to grow to 489,379 by 2041. This increase in population has put strain on the natural environment and requires ongoing investment to keep up with demands for sustainable services and to ensure the ongoing health of our natural assets.

Wyndham is home to many significant waterways, wetlands, coastal areas and grasslands, such as the Werribee River, Skeleton Creek, the Port Phillip Bay coastline, the Truganina Cemetery remnant grassland, the Point Cook Coastal Park and the Western Treatment Plant Wetlands.

Sustainable City

Rapid growth and urban expansion has led

to a number of environmental challenges in

Wyndham, including growing congestion on

our roads, increases in waste and planning

for a changing climate.

Wyndham’s work to support a sustainable

city is diverse and reflective of the wide

range and context of the Wyndham

environment. This work ranges from

community renewable energy to managing

urban environments and sustainable

transport infrastructure.

Wyndham’s community are embracing

renewable energy, highlighted by postcode

3029 ranking 15th for its uptake of solar

energy in Australia. Our refuse disposal

facility is increasingly diverting recyclable

materials from landfill, and 32% of

households now use green waste bins.

The natural environments within both the

urban and rural areas have renewed focus

through the development of the City Forest

and Habitat Strategy, which sets actions and

targets for habitat creation and tree canopy

cover. Residents of Wyndham are becoming

more active with 24km of additional shared

or dedicated bike paths, and are embracing

Wyndham City’s Green Living Series, which

has grown from just ten events in 2014 to a

total of 38 events in 2018.

Planning for growth is a complex issue, and

Wyndham is identifying how to best enhance

our environment through the planning

system. Planning controls to incorporate

better environmentally sustainable design

(ESD) features have been developed and

are awaiting progression through the State

planning system, with further controls to

support protection of trees and natural assets

under development.

Sustainable City - Case Study

Waste Watchers

Inspired by the ABC’s War on Waste series, 10 families from across Wyndham took part in Waste Watchers, a program to put the large amounts of waste leaving our households on a diet.

Over the four week period, participants were equipped with knowledge on how to reduce what they send to landfill and improve their recycling, through methods like composting, worm farms, keep cups, boomerang bags, soft plastics recycling and more.

Overall the group reduced their waste going to landfill by 68%. Key to this success was composting organic food waste through a worm farm or compost bin, recycling soft plastics at their local supermarket and improving their recycling knowledge. Not only did participants reduce their garbage but they also reduced the level of content in their recycling bins by 33% demonstrating that behavioural change can significantly impact the amount of waste generated.

Sustainable City - Case Study

Gardening Champions Program at Saltwater Community Centre

In March 2018, the Gardening Champions program was launched at Saltwater Community Centre. The aim of this pilot project was to give participants the opportunity to learn how to cultivate their own food and to encourage positive social interaction within the community.

A group of 20 people were selected to join the pilot project to activate the community garden. Participants have been involved in a variety of activities including; cleaning up the gardens beds, installing irrigation systems, planting and undertaking weekly tasks to maintain the garden.

Activities were guided by local horticultural expert, Craig Castree from Edible Gardens, with the support from Council’s Community Centre and Sustainability teams.

Permaculture has been the driving gardening philosophy where participants have been learning to implement alternatives to chemical fertilizers including companion planting and crop rotation. Another big learning for the group has been how to improve their dietary habits by growing their own food and the link between food, climate change and waste generation.

This has been a great opportunity for a diverse multicultural group to work together, learn from each other’s culture and to continue to grow traditional produce. We are looking forward to continuing with this program in 2018/19.

Valuing Nature

Wyndham is home to a number of significant

waterways, wetlands, coastal areas and native

grasslands. The security of our significant sites cannot be taken for granted as most native vegetation types they support have been cleared elsewhere and are now classified as

endangered, vulnerable or depleted.

Wyndham City has had a new Green

Wedge Plan incorporated into the

planning scheme, and a Coastal

Management Plan is currently being

developed. This strategic work will

set the broad direction for the use

and management of these important

landscape features. The City Forest

and Habitat Strategy sets the long

term direction for the management of

our natural spaces.

Over the last financial year, Wyndham

City has planted nearly 38,000

indigenous plants in conservation

reserves and sowed over 100kg of

native grass seed to help restore

and maintain some of our critical

local ecosystems. Council has also

supported private landholders in

Wyndham’s rural areas to manage

their land through our Land

Protection Grant Scheme, where 49

rural properties carried out weed

control and revegetation projects to

enhance the natural landscape. This

scheme is growing each year as we try

to preserve the endangered grassland

ecosystems in our municipality.

Litter in our environment is an ongoing

problem, however the community

is taking a stand. Litter reports were

up 25% in 2017/18 compared to the

previous financial year. There has also

been a 12% drop in litter and dumping

in key sites across Wyndham, a result of

amenity improvements and increased

signage in these areas. A major

upgrade of gross pollutant traps on our

waterways, began in 2017/18, which

will see even more litter captured

before it enters our rivers and streams.

Valuing Nature - Case Study

Creating Wyndham’s Urban Forest

Trees play an important role in Wyndham, helping to keep Wyndham healthy and liveable. They enhance the streets, making them greener, safer and more enjoyable places to live. Once mature,

street trees provide a wide range of benefits, including:

* Increasing property values
* Reducing the need for home heating and cooling
* Improving the look of the street
* Providing shade
* Providing clean air
* Improving the health and wellbeing of residents
* Creating homes for local wildlife
* Reducing the impact of our Urban Heat Effect

Wyndham is, however, recognised as having one of the lowest canopy covers of all Melbourne municipalities; it is currently estimated that around 35% of our nature strips have empty spaces

that require planting to achieve full street tree cover.

To address this, Wyndham City has committed to creating an Urban Forest. Last year, we planted a total of 4,326 trees in our streets and parks in the older areas. All new developments are designed

and planted with an aim to have tree lined streets and to meet our target of at least 25% canopy coverage by 2040.

In the coming years, Wyndham will plant even more trees in our streets and open spaces to help us reach our targets, aiming for 7,000 new advanced trees in our streets each year.

Valuing Nature - Case Study

Land Protection Grant Scheme

Weed management in Wyndham’s rural areas is a vast and complex problem, and has a significant impact on agricultural productivity and the environment. Common weeds in rural Wyndham include Serrated Tussock, Artichoke Thistle and African Boxthorn. Their control does not stop at the

fence line and requires landowners to work together to reduce the impacts.

Integrated weed control uses a combination of management techniques to suppress the targeted weed species and promote desired vegetation. This may involve the use of strategic or exclusion grazing, slashing, herbicide application, and/or revegetation with native and non-native plants. Works must be undertaken at specific times of the year, depending on the life cycles of the targeted weeds.

Wyndham City offers support to rural landowners, through the Land Protection Grant Scheme, to assist in the challenging task of integrated weed control and sustainable land management.

During 2017/18, rural landholders were supported to control weeds on 2,477ha of land. This was achieved by providing direct financial assistance for landowners to conduct their own works, as well as through the engagement of specialist contractors to undertake weed control on a larger scale.

Wyndham City is committed to continuing the Land Protection Grant Scheme and landowner education programs, and will update the Weed Management Framework in 2018, which will provide a broader strategic approach to this issue.

Council Leadership

As an organisation that provides multiple services and manages buildings, open spaces, community facilities and events, Wyndham is in a great position to role model and showcase environmental

principles and practice in the delivery of our work.

In a bid to improve Council’s energy efficiency, hybrid vehicles have been purchased as part of our corporate fleet. Plug in hybrid SUVs have been trialled and are being assessed as a replacement for diesel vehicles. Wyndham is increasing resource recovery through improving recycling and green waste diversion throughout Council buildings and facilities to play our part in reducing the pressures on our landfill facility.

Wyndham’s Environmentally Sustainable Design Framework (ESD) is being implemented through the design of the new Wyndham Aboriginal Community Centre and Integrated Family Centre, which will meet a 5-star rating under the Green Star specifications. During 2017/18 Wyndham delivered six minor building and refurbishment projects that were 100% compliant with the ESD Council Framework.

Council Leadership - Case Study

Civic Centre Large Scale Solar System

Wyndham City’s Large Scale Solar Project spanning over 30 Council buildings was rolled out in 2017/18. As part of this project, a huge 337kW solar system was installed at the Wyndham City Council Civic Centre in May 2018. The installation, including 1,144 solar panels that almost covered the entire roof of the Civic Centre, is expected to produce 443 mega-watt hours of energy per year. This is equivalent to an annual energy offset of 90 residential households.

Since the installation of the solar system, there has been a significant reduction in net energy use from the grid. Initial figures indicate around a 20% reduction when comped to the previous year for the site. These figures are expected to improve in the summer months when solar production is at its peak.

By the end of 2018/19, the Large Scale Solar Program will see over 2MW of solar and 386kWh of battery storage installed on Council buildings across Wyndham.

Council Leadership - Case Study

Smart Bins

Wyndham City was one of the first Council’s in Victoria to install smart garbage and recycling bins. The 16 dual solar compactor bins are installed at various locations in the Werribee and Point

Cook CBDs.

These smart bins have solar powered compacting technology so they can hold up to 600 litres of rubbish – five times that of traditional street bins. Powered by solar panels on top, the bins

automatically crush rubbish inside, giving them the extra capacity.

The bins have sensors which notify Council when they are nearing full, which has resulted in them being emptied less often. Less trips by garbage trucks means cost savings and less pollution in

our local environment.

In the first 12 months of operation:

* 441,871 litres of recycling was diverted from landfill;
* We are achieving 80% collection efficiency; and
* The average monthly collections for the bin dropped from 28 times per month to below 6- an impressive 80% reduction.

Integrated Water Management

Traditionally, the urban water

streams of potable water,

wastewater, groundwater

and stormwater have been

managed separately to

ensure a secure water supply,

protection of human health,

and protection from floods.

However, the ability for

these different management

systems to deliver services is

increasingly being challenged

through things such as climate

variability, population growth,

and growing community

concern on the health of their

open spaces.

An integrated, strategic approach is

therefore necessary. Integrated Water

Cycle Management (IWCM) recognises

the social, economic and environmental

objectives of water in our communities

and the shared responsibilities in

delivering these objectives.

Wyndham City is implementing

IWCM projects including improved

planting specifications for our new

street trees to help retain water in

the root zones, advocating for the

extension of the recycled water main

to Werribee City Centre and a Water

Sensitive Urban Design Plan to help

Wyndham integrate the use and

management of water as a critical

component of urban development.

One aim of the IWCM is to improve

collaboration and engagement with

stakeholders. This is demonstrated

through our partnership with

Melbourne Water to deliver

‘Greening the Pipeline’; the

revitalisation of the Main Outfall

Sewer. Wyndham is currently hosting

the Coordinator of this project.

Residents have also taken onboard

ways to improve their water usage

through the Green Living Series, for

example the wicking bed workshop

demonstrated how residents can

use up to 50% less water in their

vegetable gardens.

Integrated Water Management - Case Study

Protecting our Rivers and Creeks

Council has assessed the stormwater wetlands and litter traps along Lollipop Creek, Skeleton Creek and the Werribee River and a number were identified as not meeting current best practice for

stormwater treatment and litter control. As a result, Council has agreed to upgrade these assets with 9 wetlands and 11 litter traps to be upgraded over the next three years. We are currently in the process of completing the design requirements for these upgrades. In 2018/19 the first wetland

to be upgraded is located at Flinders Crescent, Wyndham Vale (draining to Lollypop Creek). The first 2 litter traps to be upgraded are located at Bromage Close and Stephen Court in Hoppers

Crossing (draining to Skeleton Creek).