

Wyndham City 2017-2018

State of the Environment Report



Contents

Wyndham City Overview	3
Wyndham City Environment and Sustainability Strategy 2016-2040 - Our Environment, Our Climate, Our Future	4
Sustainable City	5
Valuing Nature	11
Council Leadership	17
Integrated Water Cycle Management	21

Acknowledgement

Wyndham City Council recognizes Aboriginal and Torres Strait Islander peoples as the First Custodians of the lands on which Australia was founded. Wyndham City acknowledges the Wathaurong, Woiwurrung and Boonwurrung peoples of the Kulin Nation as the Traditional Custodians of the lands on which Wyndham is being built.

For tens of thousands of years, the Werribee River has been a significant meeting place for Aboriginal people to build community, exchange resources, and share responsibility for its lands.

Wyndham City pays respect for the wisdom and diversity of past and present Elders. We share commitment to nurturing future generations of Elders in Aboriginal and Torres Strait Islander communities.



Wyndham City Overview



This 2017-2018 State of Environment Report for Wyndham City Council provides a snapshot of Wyndham's environment. Further, it promotes Council's environmental achievements and progress towards targets set out in the Wyndham City Environment, Sustainability Strategy 2016-2040 and Wyndham's Integrated Water Cycle Management Plan.

This Report describes recent actions undertaken by Council and the community to protect and enhance the natural environment and improve sustainability in Wyndham.

The City of Wyndham is located on the south-western edge of metropolitan Melbourne. Wyndham covers an area of 542km², features 27.4km of coastline along Port Phillip Bay, and is adjacent to the municipalities of Greater Geelong, Moorabool, Melton, Brimbank and Hobsons Bay.

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

Wyndham City Environment and Sustainability Strategy 2016-2040 - Our Environment, Our Climate, Our Future

Wyndham City's Environment and Sustainability Strategy is an active document, setting the environmental agenda for our municipality until 2040. It provides short and long term targets as we endeavour to move toward a genuinely sustainable future.

While global issues such as climate change, traffic congestion, population growth and consumption patterns will affect us, we also have the opportunity to provide local responses unique to Wyndham and to be leaders in providing sustainable outcomes.

Wyndham has significant environmental assets that feature rare flora and fauna, expansive grasslands, natural coastline, sites of international migratory importance and unique waterways and wetlands. Many of these assets are under the care of Wyndham City Council.

This State of Environment Report will provide an update on the progress towards the short-term targets and actions and has been broken up into four key themes:

- Sustainable City - Progressing towards a sustainable City
- Valuing nature - Conserving and improving natural values, rural areas and the urban environment
- Council leadership - Guiding Council's functions and governance
- Integrated Water Management- Facilitating collaboration surrounding integrated water projects

The progress made in 2017/18 has been demonstrated with a coloured dot to show the movement towards the short-term targets. Red indicates that no progress has been made from the 2016/17 baseline, yellow shows that a small amount of progress has been made, green indicates that significant progress has been made towards achieving the target and a tick indicates that the target has been achieved.

Strategy implementation has been generally successful over the past twelve months. A summary of progress is highlighted below:

- 5 work not started (●)
- 27 some progress (●)
- 25 significant progress (●)
- 12 achieved (✓)



Sustainable City

Rapid growth and urban expansion has led to a number of environmental challenges facing the City, including a forecasted rise in greenhouse gas emissions, growing congestion on road networks, increases in waste and gaps in planning for a changing climate.

In order to address these changes a collaborative approach with community, regional groups and government agencies is required. It is anticipated that collaboration will result in a range of broader benefits to Wyndham and the surrounding area.

1.1 Community Energy and Greenhouse Gas Reduction

Assisting our residential community and business/industrial sectors to save energy and use alternate power sources will have long term financial and environmental benefits for our region.

Short Term Targets (working toward 2020)

At least 55,000 tonnes of greenhouse emissions (CO₂ equivalent) avoided from residential and business sectors through the Low Carbon West Strategy.

A Wyndham postcode is ranked in the top 10 in Australia for the number of residential solar photovoltaic systems.

At least 1 Greenstar or equivalent rated community within the municipality.

2017/2018 Progress

Wyndham residents and businesses have installed over 17,000kW of solar since the base year 2014/15. A total community emission reduction of almost 40,000 tonnes.

As at 30 June 2018 postcode 3029 ranked 15th (7,156 units) & 3030 ranked 21st (6,321 units).

There are three Green Star community projects registered in Wyndham:

- Life, Point Cook
- Harpley,
- The Grove,

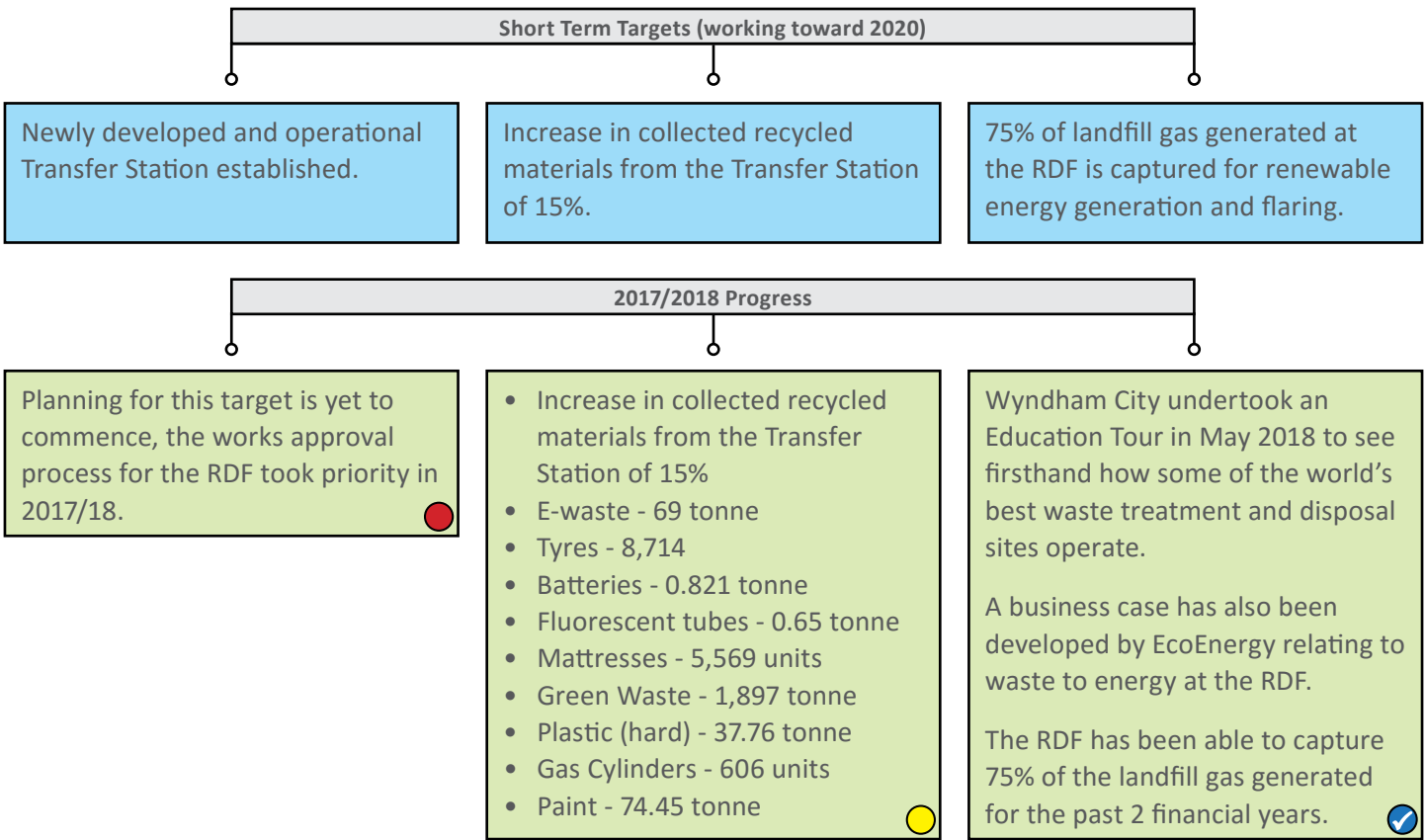
There are seven EnviroDevelopment Communities in Wyndham. These are:

- Savana, Wyndham Vale
- Rothwell, Tarneit
- Ellarook, Truganina
- Saltwater Coast, Point Cook
- Wyndham Harbour, Werribee south
- Alwood, Werribee
- CIRQ, Point Cook

Sustainable City

1.2 Refuse Disposal Facility (RDF)

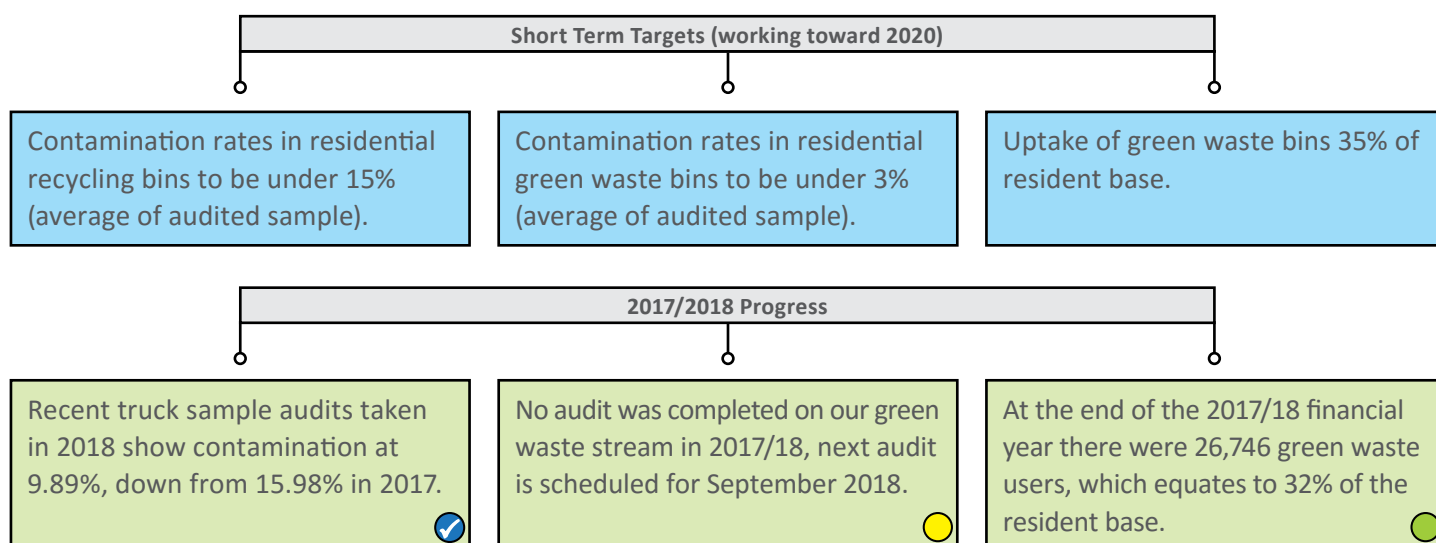
The Werribee RDF has been declared a waste hub of state-wide significance in Victoria’s State-wide Resource Recovery Infrastructure Plan. Advancements in infrastructure and technology can ensure the RDF is a best practice operation leading the way in resource recovery, job creation, renewable energy and greenhouse gas abatement.



Sustainable City

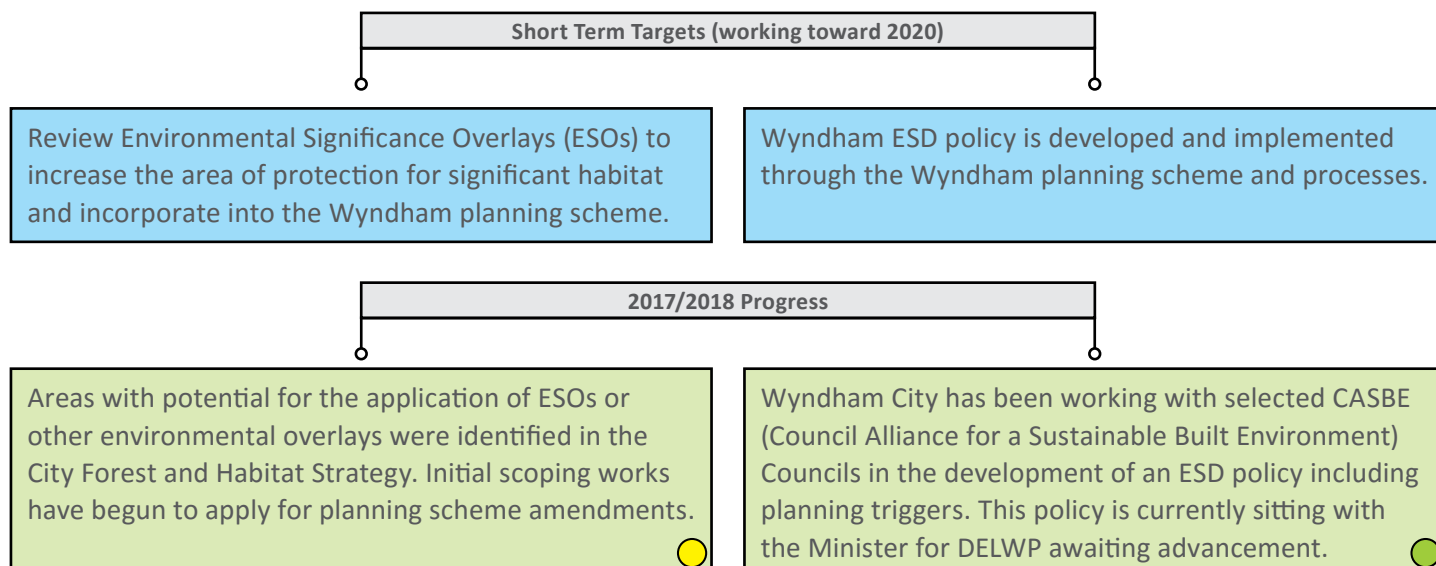
1.3 Waste and Recycling Services

There are many benefits to diverting waste from landfill; including preservation of natural resources, reduced energy and water use and reductions in greenhouse gases. Education campaigns are required to ensure Wyndham's diverse and growing community is well informed on waste avoidance and diversion methods.



1.4 Planning Controls and Growth

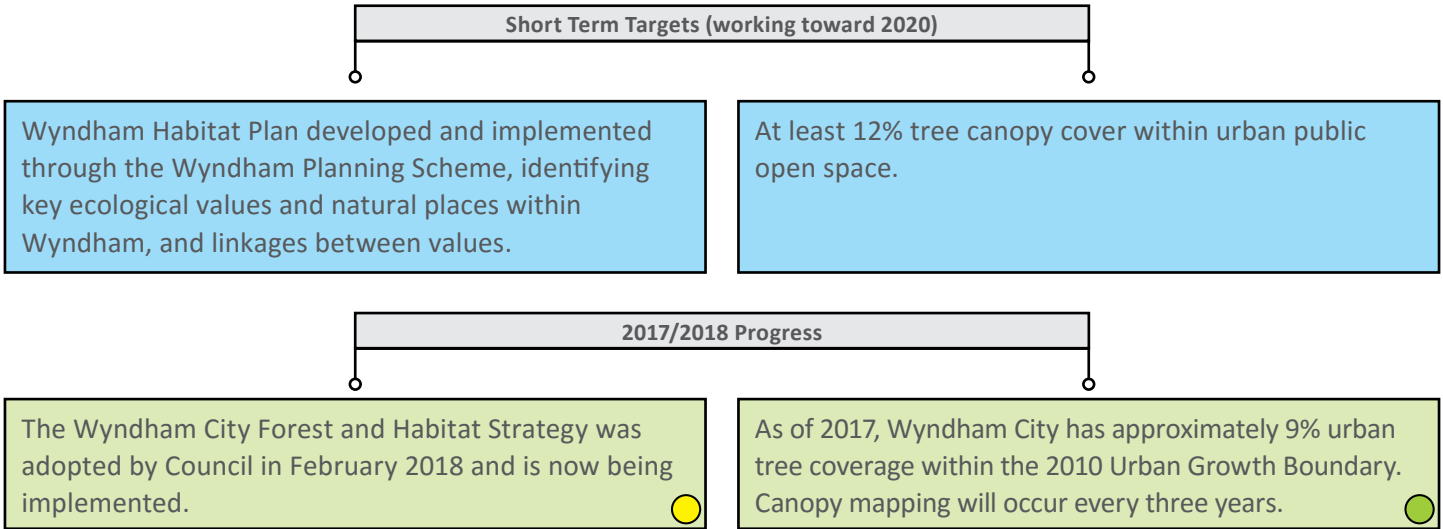
An efficient way to protect Wyndham's environmental values and reduce environmental impact is by implementing effective statutory planning requirements. Strong policy and planning controls relating to environmentally sustainable design (ESD) will significantly reduce the impact of development on the broader environment.



Sustainable City

1.5 Urban Ecology

Urban habitat for flora and fauna is essential for community interaction with nature and providing corridors that connect with larger natural areas inside and outside the municipality. These areas will be protected through statutory planning controls, community action and management.



Sustainable City

1.6 Transport

With rapid population growth and development pressures, Wyndham's road network is increasingly congested, driving the need for more sustainable transport options and alternative ways to travel across, in and out of the City.

Short Term Targets (working toward 2020)

Increase weekday train patronage from Wyndham stations to the City to 15% of Wyndham's population.

Increase weekday bus patronage to 10% of Wyndham's population.

A minimum of 3km of new bike lane/pathway is constructed each financial year.

2017/2018 Progress

In 2016 weekday train patronage was 10.5% of Wyndham's population. Initial results for 2018 show Werribee and Hoppers Crossing Station with relatively unchanged patronage numbers, whilst Williams Landing Station has seen a 30% increase in patronage. ●

In 2016 weekday bus patronage was 7.9% of Wyndham's population. Initial results for 2018 are variable, showing an 8% increase in patronage during May and a decrease of 4.6% in June ●






19 kilometres of shared pathways and 5 kilometres of bike pathways were constructed in Wyndham in the first six months of 2018. ✓



Sustainable City

1.7 Community Engagement

Community engagement leads to more connected neighbourhoods and districts, and a stronger sense of place. There are many benefits for having targeted and planned involvement with the community; such as building capacity and leadership, reaching 'disengaged' individuals and to instil positive behaviour change amongst the community.

Short Term Targets (working toward 2020)	2017/2018 Progress
Triple community reach of environment & sustainability engagement activities.	Current reach is 11,468 people up from 6,046 in 2015. This is measured through eNewsletter (1,588), Facebook (2,913), Green Living Series attendees (2,169), School events (4,201), community planting days (447) Habitat Heroes (60) and other community education days (90). 
That the environment is seen as a priority issue by the community in all Wyndham 2040 districts and current district plan environmental issues have been addressed.	All environmental actions within the four district plans are on track. District Plans are updated every 4 years and not scheduled for renewal until 2018. 
Establish and maintain a community and business environmental leaders forum to support community led projects.	<ul style="list-style-type: none"> Supporting the Williams Landing Resident's association to establish a community garden on the Main Outfall Sewer reserve. Ongoing support is provided for environment & sustainability 2015/16 Building Blocks participants on their own environmental programs. Establishment of a gardening leadership group to activate the gardening space at Saltwater Community Centre. 
Finalise policy and procedures to support the establishment of community gardens.	A complete list of Community Gardens in Wyndham has been developed and is available on the Wyndham City website. A community gardens policy is expected to be adopted in 2018/19. 
Support home food gardening via a dedicated education and behaviour change program.	As part of the Green Living Series in February - April 2018, five edible gardening workshops were delivered. In addition to this, an edible gardening educational program has been developed at Saltwater Community Centre. 

Valuing Nature

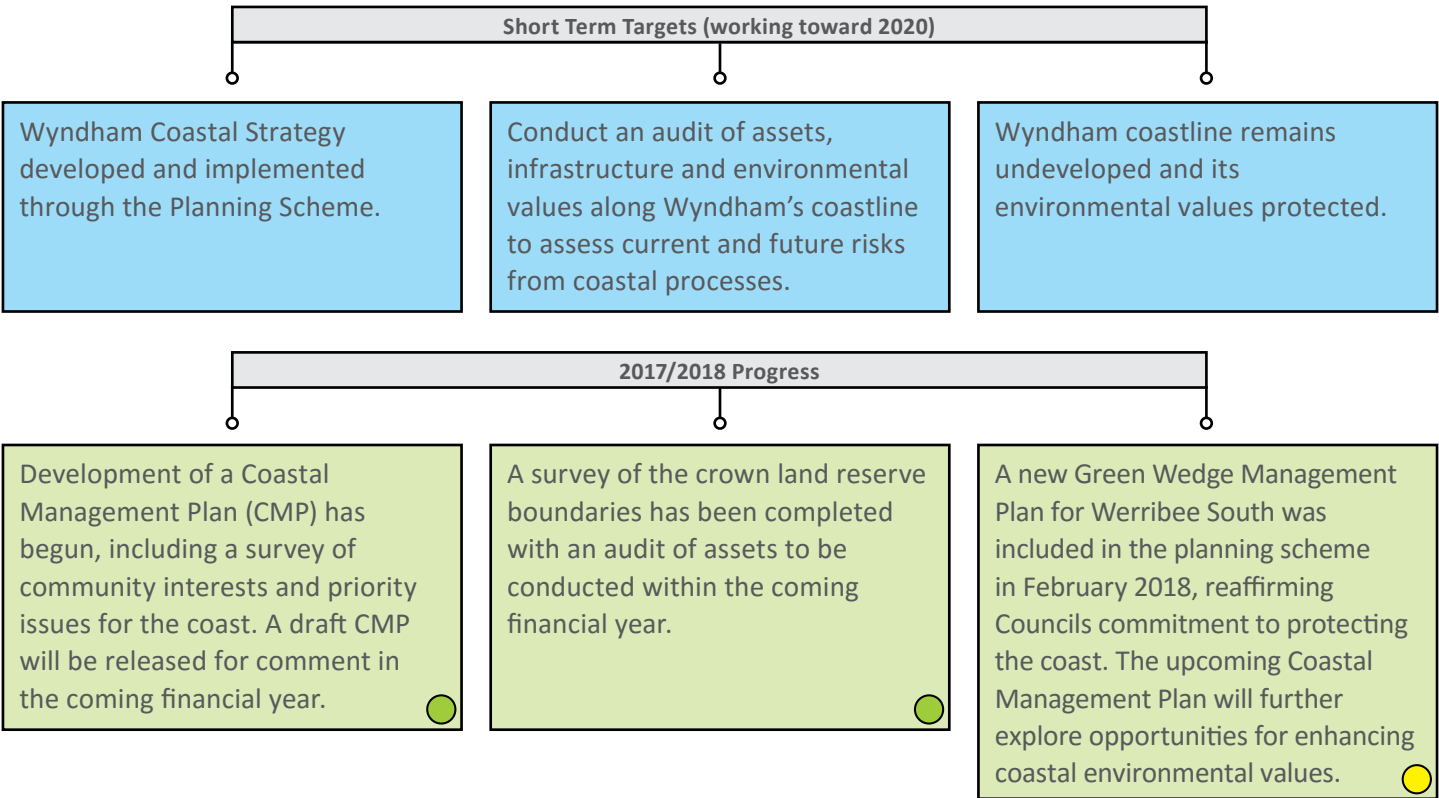
Wyndham is home to a number of significant waterways, wetlands, coastal areas and native grasslands, including the Werribee River, Little River, Skeleton Creek, the coastline, Truganina Cemetery remnant grassland, Point Cook Coastal Park and Western Treatment Plant Wetlands. The security of these significant 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.



Valuing Nature

2.1 Coast

Wyndham’s coastline is likely to experience increasing use and visitors over the coming years. Increasing access and climate change will present varied issues, and will need to be well managed and supported to ensure the quality of coastal natural assets is maintained and enjoyed by all.



Valuing Nature

2.2 Land Management

Wyndham’s rural land and natural areas need to be maintained and managed to reduce the impacts of weeds and feral animals on environmental and agricultural values.

Short Term Targets (working toward 2020)

Increase in area of private rural land managed through the Land Protection Grant Scheme or equivalent land management program by 20%.

Increase in weed control awareness and accountability among rural landowners through local education programs.

2017/2018 Progress

Through the Land Protection Grant Scheme in 2017/18:

- Landholders were supplied with over 1,500 indigenous plants for revegetation on private property
- 1,647ha of contractor weed control and revegetation works were undertaken on 15 properties (increase of 407%)
- 830ha of landowner works undertaken on 34 properties.

Wyndham hosted a Weed Control Workshop and Weed Expo during 2017/18.

2018 has seen continued engagement and outreach through the Land Protection Grant Scheme. Review of Wyndham’s Weed Management Framework driven by community and stakeholder consultation will be available as an educational tool for rural landowners.



Valuing Nature

2.3 Biodiversity

Wyndham's rural land and natural areas need to be maintained, enhanced and protected as destinations of enjoyment and appreciation for the community. Showcasing the unique natural features for Wyndham will instil a sense of pride and contribute to a positive quality of life for our community.

Short Term Targets (working toward 2020)	2017/2018 Progress
<p>Increase in overall extent and condition of native habitat conservation sites on Council land whilst protecting cultural heritage and being informed by indigenous land management practices.</p>	<p>37,584 indigenous plants were planted into conservation reserves along with the direct seeding of 103kg of indigenous grass seed to increase biodiversity and protect cultural heritage in these areas.</p>
<p>Commence an enhanced biodiversity monitoring program on Council managed conservation sites.</p>	<p>Biodiversity monitoring of 10 high value conservation sites will commence in Spring 2018.</p>
<p>All Council managed conservation sites to have a site action plan prepared, implemented and reviewed annually.</p>	<p>There are 38 active site action plans in place with a number of others in development.</p>
<p>Protect the entire Western Grassland Reserve from development or encroachment.</p>	<p>In 2017/18 there was no reduction in the extent of the State Government's proposed Western Grassland Reserve.</p> <p>1,264ha of the Western Grassland Reserve (8.4%) have currently been acquired by the State Government. Wyndham City is providing strategic support and guidance for appropriate land management.</p>
<p>Advocate for dedicated State resources to manage pest plant and animals in the Western Grassland Reserves and surrounding areas.</p>	<p>Council has continued to chair the Western Grassland Reserve Weed Management Group. In this role we are facilitating and advocating for collaborative management strategies and resources. Council has secured additional State Government funding in 2018/19 to undertake progressive and innovative techniques to address invasive species that directly impact residents in Wyndham.</p>

Valuing Nature

2.4 Litter

Litter is Wyndham's most visible form of pollution; it is imperative that a combined approach of education, infrastructure and enforcement is utilised to tackle this issue.

Short Term Targets (working toward 2020)


Increase in number of community litter reports by 25%.


Develop baseline on infringements issued against illegal dumping events by 2018.

Develop robust reporting and classification of littering data (e.g. separation of street sweeping, litter bins, dumping, roadside litter figures).

25% reduction of litter at 15 regularly monitored locations including rural, urban, industrial, developing, waterways and coastal areas.


2017/2018 Progress


Litter reports were up to 3,423 in 2017/18 (70% increase from baseline, 25% increase from 2016/17). 

184 EPA infringements were issued in 2017/18 which is a 260% increase on the previous year. 

Litter & illegal dumping vehicles collected 2,480 tonnes of litter and illegally dumped items (2016/17 - 1,367 tonne, 2015/16 - 2,843 tonne).

The street sweeping vehicles collected 1,544 tonnes (2016/17 - 1,766t, 2015/16 - 971t).

Council garbage trucks collected 483 tonnes from Council reserves (2016/17 - 377t, 2015/16 - 331t). 






Using the Local Litter Measurement Toolkit (LLMT) 2017/18 has seen an overall 12% drop in litter and illegal dumping at the 15 monitored sites. Some sites had higher ratings when compared to 2016/17 but overall there were more sites showing signs of improvement. 



Valuing Nature

2.5 Waterways

Wyndham's waterways are some of our community's most valued natural areas, providing habitat for a diversity of native plants and animals, they are highly frequented places of recreation and wildlife appreciation.

Short Term Targets (working toward 2020)	2017/2018 Progress
Completion of an audit of all gross pollutant traps (GPTs) within the municipality, measuring the design, maintenance and source of litter for each outlet.	Audit completed in 2016/17. Works are now underway to upgrade priority GPTs to improve litter capture. 
Water quality monitoring locations and/or modelling to measure and report water quality status on the lower reaches of the Werribee River.	Water quality monitoring is being conducted by Werribee River Association in conjunction with Waterwatch at Bungey's Hole, Werribee. Melbourne Water have released a new draft Catchment Works Program for the Werribee River including measures of current and river condition and targets for improvement. 
Agreement from all relevant authorities to increase environmental flows to lower reaches of Werribee River, including the water resources to be used.	<ul style="list-style-type: none"> 1,307ML was released for environmental flows in 2017/18, which is an increase from previous years. Melbourne Water has released a new draft Healthy Waterways Strategy and Catchment Works Program identifying increased environmental flows for the Werribee River. Southern Rural Water works are underway to upgrade irrigation infrastructure in Werribee South. 1/3 of the water savings will be returned to the river in accordance with the Central Regions Sustainable Water Strategy. 
Improved environmental flow compliance as reported in the Melbourne Water seasonal watering proposal.	<p>Only 3 of 7 environmental flow objectives were partially achieved for the Werribee River in Wyndham (2 were not measured).</p> <p>This remains an improvement from the baseline year but is a decrease from last year due to lower rainfall.</p> 
Decrease in the frequency and duration of summer blue green algae blooms in the lower Werribee River.	The 2017/18 summer did not see any algal blooms in the Wyndham stretch of the Werribee River. 1 bloom was recorded in March 2018. 



Council Leadership

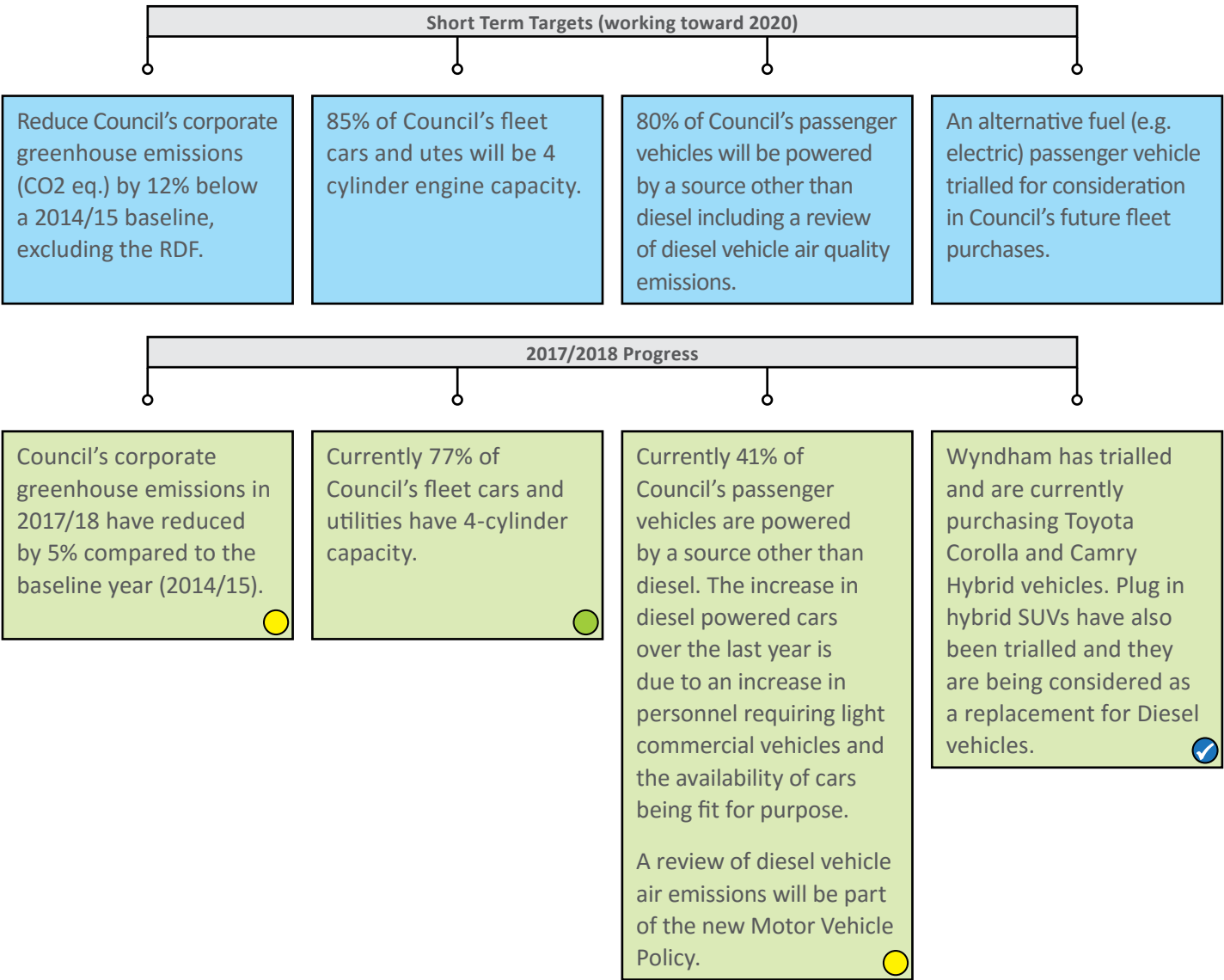
As an organisation which provides multiple and varied services including; buildings, open spaces, facilities and community events, Wyndham is in a position to role model and showcase environmental principles and practice across a broad range of functions. With residents accessing facilities and events on a regular basis, there are many opportunities to inspire and share learnings on enhancing the environmental benefits of building design and operational programs which the community can adopt and use in homes and businesses.

Further, embedding a more sustainable approach to how we operate our facilities will result in a longer life of assets and significant long term cost savings in relation to energy and water use.

Council Leadership

3.1 Greenhouse Gas and Air Pollution Reduction

Improving energy efficiency of Council’s buildings, fleet, facilities and operations will result in long term financial savings and reduce Council’s carbon footprint.



Council Leadership

3.2 Integrated Water Management

As a significant user of water and stormwater manager, Council has an important role to play in saving water and supporting healthy waterways.

Short Term Targets (working toward 2020)

Achieve Council water use efficiency (mains and recycled) of 2.3 KL/per resident/per year.

At least 32% of Council's water use demand to be from alternative water sources.

At least a 10% increase in the number of Council stormwater treatment wetlands that meet Melbourne Water's Constructed Wetlands Design Manual best practice design standards (2015).

2017/2018 Progress

In 2017/18 Council's water use was 2.52kL/per resident which has increased compared to the 2.19 kL/per resident in 2016/17. This is largely due to the increase of Council's water use for sports field irrigation and increase use of Council buildings.

Alternative water supplies contributed to 26% of Wyndham City's water demand in 2017/18. Council's overall water usage has increased by approximately 20% compared to 2016/17. This increase is due to a drier Spring in 2017 and the requirement for increased irrigation of active open spaces.

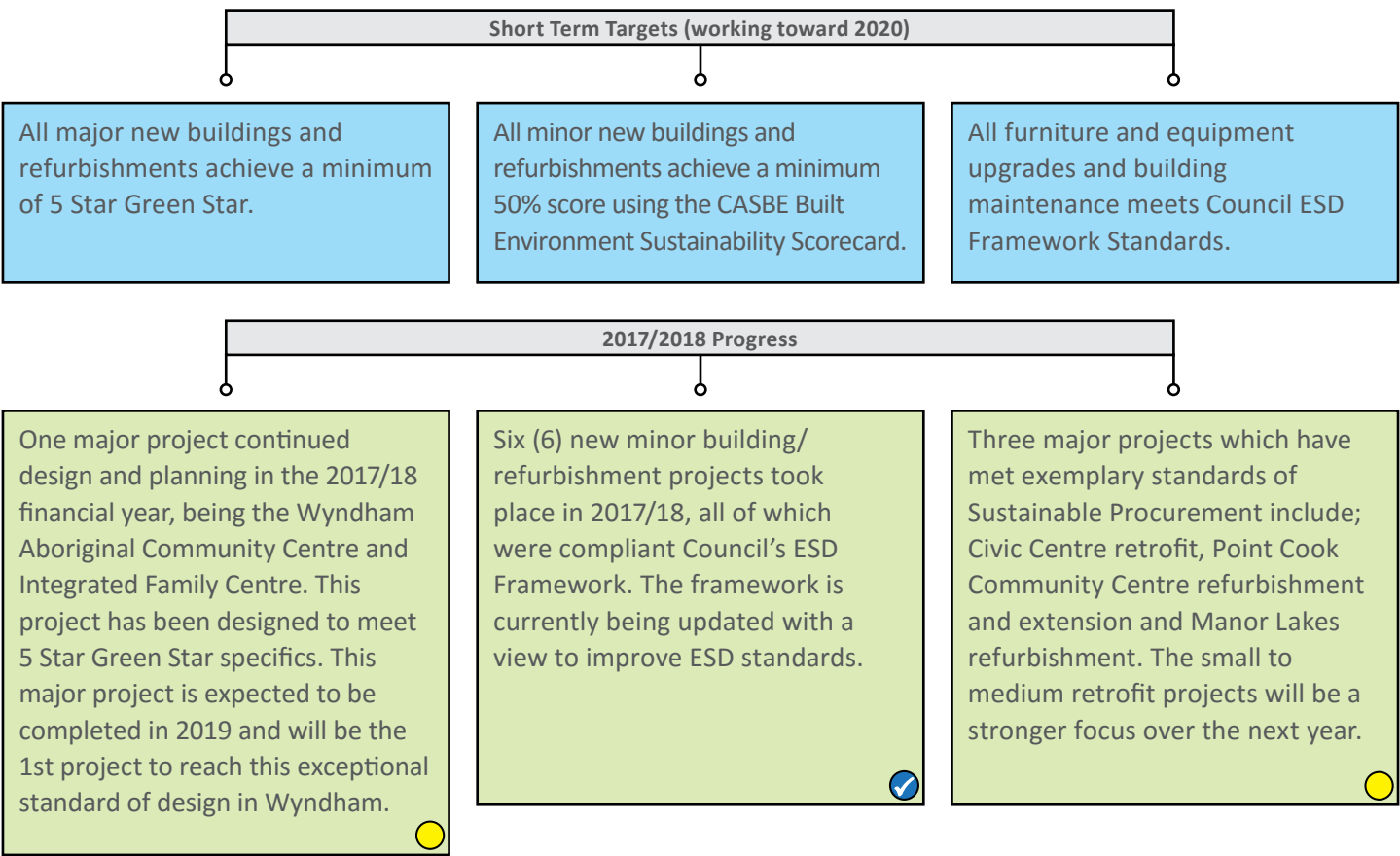
An audit of 30 Council wetlands identified 66% had moderate to good water quality treatment designs. Design work is underway to upgrade the remaining 33% of wetlands to current best practice over the next 3 years.



Council Leadership

3.3 Environmentally Sustainable Design (ESD)

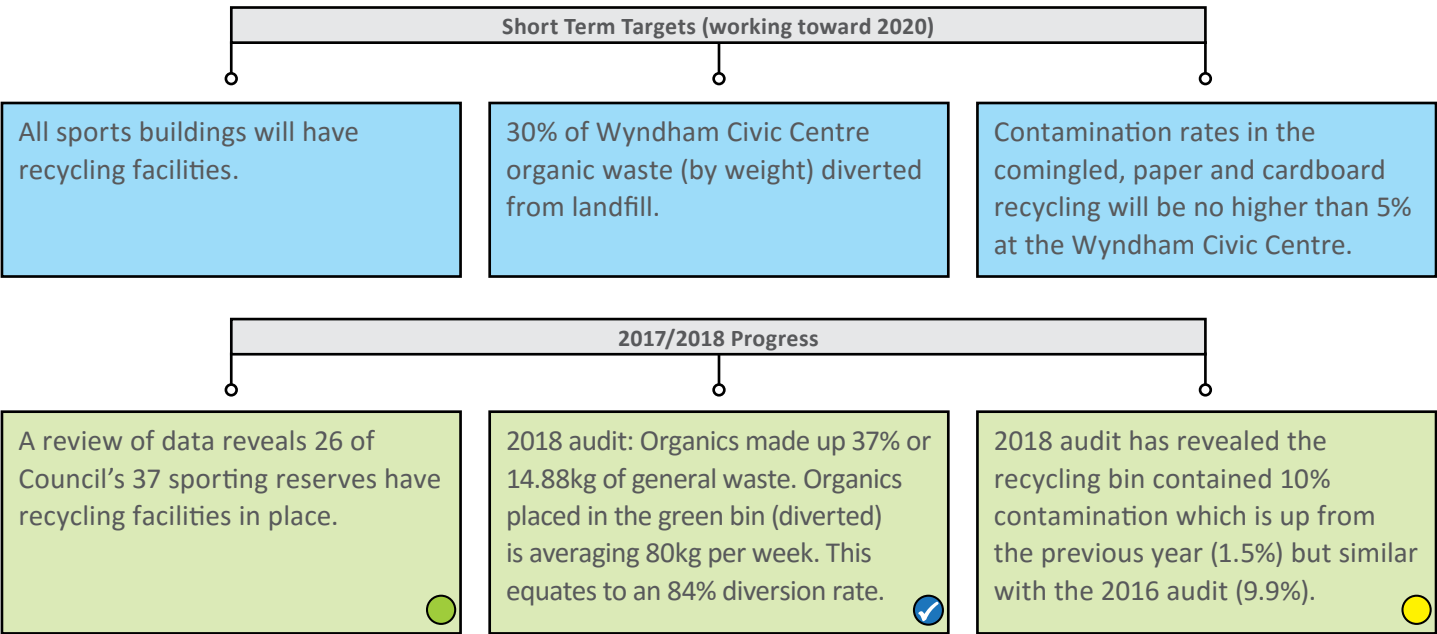
Council owns and operates a number of buildings of varying size and functionality. Operational costs and environmental impacts demonstrate the necessity for environmentally sustainable design.



Council Leadership

3.4 Council Facilities Operational Waste

With growing financial and environmental costs associated with landfilling waste, Council facilities and events need to apply measures to limit waste generated and increase resource recovery.



Council Leadership

3.5 Climate Change Adaptation

Uncertainties around climate and extreme weather events ensure we must plan, design and implement facilities, which can withstand increases in temperature, droughts, storms and flood risks. Ensuring our community is responsive to these events will contribute to future prosperity and wellbeing.

Short Term Targets (working toward 2020)

Wyndham will complete all of the actions in the Climate Change Adaptation Strategy.

2017/2018 Progress

In 2017/18 the following Climate Change Adaptation Strategy actions were completed:

- Engagement with new migrants, schools and the general community on climate change.
- Reporting on climate change indicators as part of the regional ‘How Well Are We Adapting’ project.

3.6 Sustainable Procurement

Reducing the environmental impact of Council’s purchases by selecting environmentally sound goods and services, including locally provided products is important. As a large purchaser of goods and services (capital and operating) Council has the potential to provide a significant positive impact on supply chains.

Short Term Targets (working toward 2020)

5% of all Council procurement to meet sustainable procurement standards.

All tenders above \$500,000 to have an environmental schedule within the tender specifications that is weighted and scored during the selection process.

2017/2018 Progress

4.8% of all Council procurement met sustainable procurement standards.

93% of tenders above \$500,000 included the environmental schedule.



Integrated Water Management






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.

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 asset protection (from floods). However, the ability of these isolated management systems to deliver on their services is increasingly being jeopardised through things such as climate variability, population growth, and growing community concern on the health of their open space areas. IWCM is a response to these threats and vulnerabilities.

Integrated Water Management

4.1 Create a Resilient and Liveable City

Short Term Targets (working toward 2020)	2017/2018 Progress
Ensure that 100% of irrigated active open spaces are irrigated efficiently to best practise and from alternative water supply where possible.	Active open spaces are irrigated to the best practices. A central control irrigation system has been installed and has allowed Council to use water more efficiently. Recycled water consumption has increased in 2017/18 and is used when available. 
Ensuring 100% of new or replacement trees are irrigated through alternative water resources during their establishment period, and that optimum infiltration is achieved through soil preparation and inclusion of passive irrigation features where applicable	Planting specifications for the new street tree planting tender were reviewed to reflect better soil preparation by way of the introduction of gypsum. Water-wells are placed around the base of all new street trees to aid with passive irrigation. 
Lead the community to achieve an average potable water consumption of <155 litres per person per day (equivalent to 56.6 KL/yr/person)	Council has proposed to introduce an ESD policy into the planning scheme which will require rainwater tanks in most developments that require a planning permit. This will help to reduce the average water use per resident. A wicking bed workshop was held for residents to encourage them to reduce water usage when gardening. More actions will be developed in 2018/19. 
Ensure that a minimum of 300 rainwater tanks for rainwater reuse for rainwater reuse are installed every year as part of infill residential developments in existing areas.	Council included a condition to install 372 rainwater tanks in 68 planning permits in 2017/18. Council is also proposing to introduce an ESD policy into the planning scheme which will require rainwater tanks in most developments that require a planning permit. 
Council to support non-residential customers to source >15% of their total water use from alternative supplies.	Advocating for the extension of the recycled water main to Werribee City Centre. 

Integrated Water Management

4.2 Improve the Health and Amenity of Waterways and Coastal Environments

Short Term Targets (working toward 2020)

Invest in Council projects that reduce the annual nitrogen load discharged from existing urban area by an additional 2,650 kg/yr.

Record 100% of Water Sensitive Urban Design (WSUD) assets on Council's asset management system.

Ensure 100% of new integrated water management capital works have allocated maintenance budget.

Ensure that a regular maintenance schedule is developed and implemented for all Council owned wetlands and GPTs.

2017/2018 Progress

Six wetlands were redesigned in 2017/18 and four more are scheduled for 2018/19. One wetland will be reconstructed during 2018/19. ●

A WSUD Master plan will be developed in 2018/19. ●

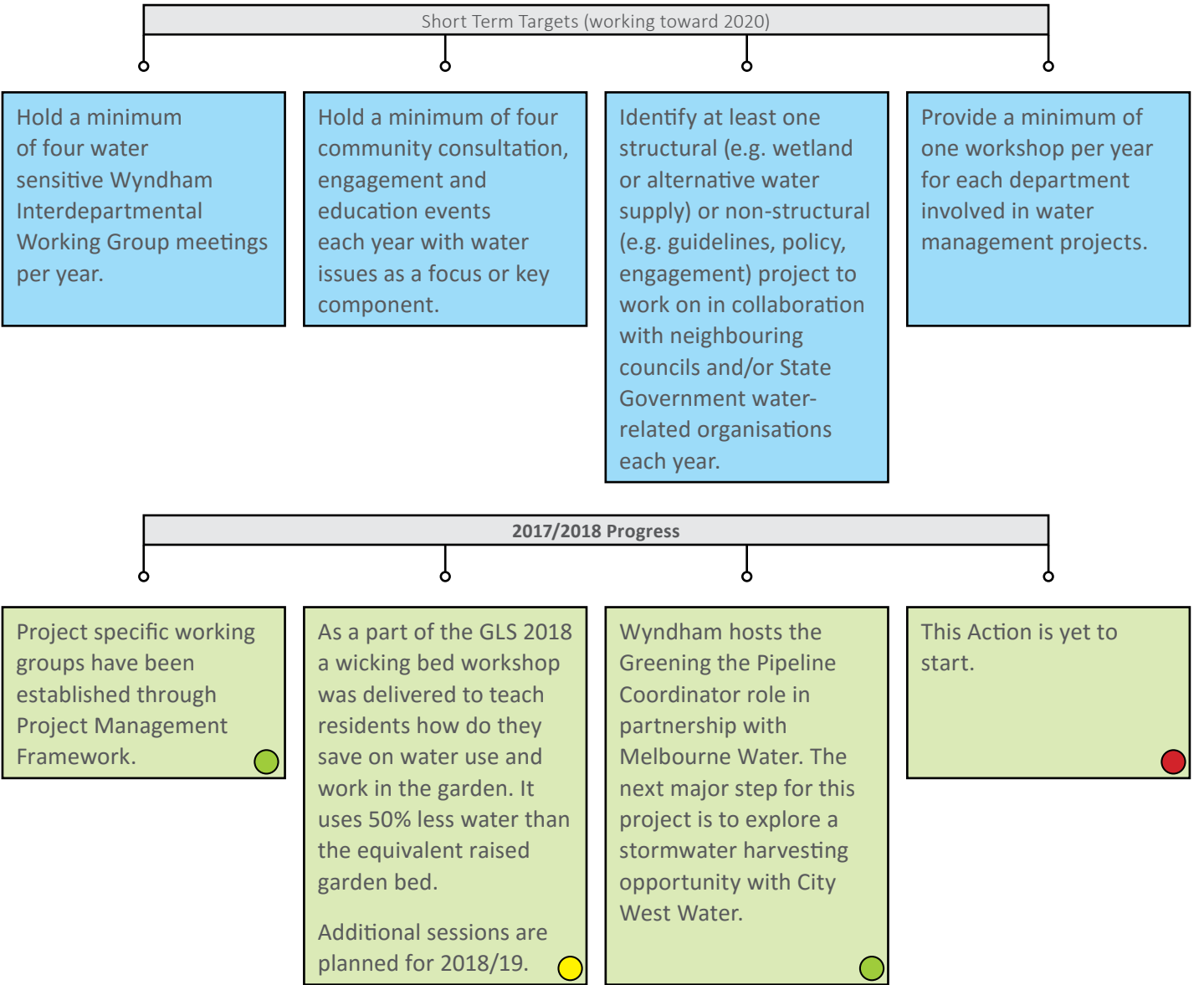
This Action is yet to start. ●

Maintenance schedules have been developed for all of Council's existing wetlands and a new process has been established to ensure that maintenance schedules are supplied with all new Developer delivered wetlands. ●



Integrated Water Management

4.3 Improve Collaboration and Engagement With All Stakeholders



With thanks...

To the members of the Wyndham community for providing information for this report. Are you doing any environmental monitoring in Wyndham?

If so, we would like to hear from you!

Please contact Wyndham's Department of Environment and Water on **9742 0777** or **mail@wyndham.vic.gov.au**