



PART

# 5

# SUSTAINABILITY



## 5.1 Open space and active recreation

### 5.1.1 Vision

The City of Ryde's open space and recreation facilities will be protected, increased and enhanced to ensure residents of all ages, backgrounds and abilities can benefit.



Helene Park, Shepherds Bay

## 5.1.2 Context

We know that open spaces and recreation facilities are important to our residents and critical to an active and healthy lifestyle. Our current spaces and facilities are already under pressure and there is limited land to develop new options. As the City of Ryde grows, it is essential for Council to use innovative approaches to support facilities

and programs that are adaptable to changing community needs and expectations.

This chapter of the LSPS outlines how Council will ensure the right mix of open space and recreation options in convenient and accessible locations across the City of Ryde LGA.



Play for all



Kayaking, Putney Park

### 5.1.3 Key challenges

- The existing open space network is already under pressure and cannot meet the demands of a growing population
- Increasing urban densities have resulted in more residents using public open space as a substitute for a backyard to support their physical and mental health and wellbeing
- Additional open space is needed in key higher-density growth areas – Macquarie Park, Ryde, North Ryde and West Ryde
- Limited opportunities for acquiring new open space
- The increasing cultural diversity and changing age profile of the LGA changes the recreation preferences to be accommodated
- Pressure to re-zone private recreation land to allow non-recreation uses rather than renewed recreation uses that respond to shifts in recreation needs
- Ensuring park design and planting strategies draw on local landscape character
- Adapting to the stresses of climate change on open space
- Maximising views of open space
- Balancing structured and unstructured recreation facilities and spaces
- Providing 1,500m<sup>2</sup> of open space within a safe and direct walking distance from every residence – 200 metres for high-density areas and 400 metres for low/medium-density areas
- Ensuring safe and convenient access to open space for all abilities
- Maintaining and extending a network of recreational corridors, linkages and connections with increasing density
- Optimising access to open space and recreation facilities by walking and cycling
- Conserving and enhancing native flora, fauna and habitats
- Providing natural connections across the City of Ryde, linking with adjoining LGAs
- Increasing density around open spaces can exacerbate conflicts between recreation and residential land uses



Livvi's Place climbing frame

## 5.1.4 Targets

The following targets will guide future developments, Council policies and programs.



**There will have been an increase in the amount of both structured and unstructured public open space in the City of Ryde, providing benefits across all ages and abilities.**



**Increase the proportion of the population within 400 meters of active public open space greater than 1,500 m<sup>2</sup> in size.**



**There will be an extended network of recreational corridors, links and connections running through the City of Ryde.**



**Local flora and fauna will be effectively conserved.**



Elouera Reserve, Macquarie Park

## 5.1.5 Planning priorities and actions

**Table 30** Open space: planning priorities and actions

Planning priority	Actions
<b>OS1 Provide accessible open space to service population needs</b>	<p>OS1.1 Upgrade the amount and distribution of open space to match current and future population needs</p> <ul style="list-style-type: none"> <li>– Prepare an Acquisition and Consolidation Program to identify opportunities where land could be acquired or consolidated to deliver new public open space or to enhance or expand existing public open space</li> <li>– Extend existing sports capacity within existing reserves</li> </ul> <p>OS1.2 Prepare an action plan aimed at improving community access to existing and future public open space via all modes</p> <p>OS1.3 Prepare a strategy that balances recreational, cultural heritage and natural values and aims to enhance open space connectivity and wayfinding across the City of Ryde</p> <ul style="list-style-type: none"> <li>– Prepare a detailed Recreational Corridor Network Plan (an integrated, LGA-wide recreational, fitness and commuter cycling and walking network)</li> </ul> <p>OS1.4 Identify opportunities for collaborating with non-Council open space land owners and private recreation providers in the LGA to increase the range and amount of, and access to, recreation opportunities</p>



Forrester Park

Planning priority	Actions
<b>OS2 Ensure open space can be shared and enjoyed by all</b>	<p>OS2.1 When planning, managing and designing open space settings:</p> <ul style="list-style-type: none"> <li>– target specific recreation priorities</li> <li>– continue to implement improvements to the landscape design quality</li> <li>– optimise recreation opportunities for all residents in partnership with other recreation providers</li> <li>– Optimising the capacity of existing open space via design and more efficient park layouts when upgrading or renewing</li> <li>– Ensure access and parking at reserves is efficient in circulation and adequate for needs when upgrading or renewing</li> <li>– Integrate passive recreation opportunity and facilities into all levels of sports reserves</li> <li>– Implement best practice in optimising safety and amenity of open space, including Crime Prevention Through Environmental Design (CPTED), environmental design, planting design and lighting</li> </ul> <p>OS2.2 Prepare guidelines for all future provision or replacement of facilities, structures and infrastructure in reserves</p> <p>OS2.3 Upgrade amenity and safety in all open space across the LGA</p> <p>OS2.4 Ensure fair and equitable access for residents and visitors (irrespective of abilities and backgrounds) and backgrounds to the City’s open space</p>
<b>OS3 Ensure future open space is delivered in a manner that maintains a healthy natural environment</b>	<p>OS3.1 Plan and manage open space to ensure that recreational access and facilities conserve natural values</p> <p>OS3.2 Plan, design and manage sustainability in all open space using best practice</p>
<b>OS4 Conserve our rich history, culture and local character through the provision of open space</b>	<p>OS4.1 Reflect and promote the LGA’s cultural heritage and diversity through the planning, design and management of open space</p> <ul style="list-style-type: none"> <li>– Liaise with the Aboriginal community to establish a means through which their cultural heritage can best be recognised within the LGAs’ open space</li> </ul> <p>OS4.2 Ensure that the unique and diverse landscape characteristics of the City of Ryde are reflected in open spaces, appropriate to specific locations</p> <ul style="list-style-type: none"> <li>– Continue current upgrades of all river and creek open spaces to enhance recreational and natural systems connectivity</li> </ul>

Planning priority	Actions
<b>OS5 Sustain open space for existing and future populations</b>	<p>OS5.1 Ensure effective administration, planning and management of open spaces (including a strategy for the provision of open space)</p> <p>OS5.2 Develop a strategy for partnerships and ongoing engagement with the community and stakeholders within the City of Ryde to extend the reach and capacity of the open space network</p> <p>OS5.3 Ensure new residents and employees have access to available open space (400m to 1,500m<sup>2</sup> active open space)</p>



Wallumai fish sculptures, part of the Aboriginal Public Art Project in Bennelong Park, Putney

## 5.1.6 Case studies

### Livvi's Place (open space)

Livvi's Place is an example of Council's vision for accessible open space and successful partnerships with the community, private and government sectors.

Livvi's Place is an all-inclusive playground where children of all abilities can play, learn and socialise together. It combines traditional and purpose-built play equipment and landscape elements to provide a safe, outdoor environment for children and carers.

The playground was created around the principles of universal design and inclusive play spaces. This means including features designed to stimulate or calm children with physical, intellectual and emotional disabilities by providing a range of sensory experiences. There are also multiple shaded rest areas and a fully accessible amenities block that includes both child and adult change tables.

Livvi's Place was delivered through a partnership between the City of Ryde Council and the not-for-profit Touched by Olivia Foundation. Support also came from AECOM, the NSW and Australian Federal governments and many other sponsors.



Livvi's Place, Ryde

## 5.2 Environment

### 5.2.1 Vision

The City of Ryde's collective ecological footprint will be reduced in ways that contribute to the liveability of the community. This will be supported by well-planned infrastructure that is responsive to future needs of residents and our natural environment, and provides equitable access to the means to reduce our individual and collective ecological footprint.



Pryor Park Bush Care

## 5.2.2 Context

The health and wellbeing of the City of Ryde's residents, workers and visitors are not separate from the health and wellbeing of our natural environment. Our quality of life depends on maintaining our natural environment so that things we take for granted, like the availability of fresh water, food and fuel sources, remain. Council and the community need to work together to protect and enhance natural areas and improve the design of built environments to make them more environmentally sensitive and sustainable.

Council manages 205 hectares of natural areas distributed between 71 parks and reserves. This includes several local and regional-scale wildlife corridors. Council has undertaken conservation significance and risk level assessments of all of the LGA's bushland reserves to develop a series of action plans aimed at ensuring our natural environment stays healthy for years to come.

Sourcing energy from renewables, particularly solar, is inspiring the development of ambitious local targets well above those outlined in Australian Government policies. The long-term goal of low carbon or even net 'zero carbon' is achievable both for Council's own operations and eventually right across the LGA.

Effective waste management is another critical component of successful environmental management. Waste reduction is only possible when it is facilitated at every stage in the development of our LGA and is therefore dependent on thorough planning.

This chapter of the LSPS outlines how Council's approach to planning will increase the sustainability of our approach to planning will increase the sustainability of our LGA and protect our unique natural environment.

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*The key is sustainability, which simply means ensuring our interactions with and use of the environment around us avoids depleting natural resources. Climate change is a threat to the sustainability of the local environment, community and way of life*

### 5.2.3 Key challenges

- The impact of development (such as increased runoff from hard surfaces) directs pollutants into our stormwater drains, which discharges into local creeks.
- The cumulative impact of loss or lack of vegetation in developed landscapes is contributing to ‘urban heat island’ effects that require cooling via new tree canopy cover and other design features.
- The impact of climate change with profound effects on infrastructure assets, environmental ecosystems and community well-being.
- Council needs to service the waste and recycling needs of the community with minimal impact on the environment and within the capabilities of waste collection services.
- Council’s initiatives will need to be supported by short-term and long-term behavioural changes within the community to reduce waste generation at its source.
- Identify and adopt suitable technology to recover resources from residual waste.



Livvi's Place, Ryde

## 5.2.4 Targets

The following targets will guide future developments, Council policies and programs.



**By 2050, there will be net zero carbon emissions across the City of Ryde (carbon neutral).**



**By 2030, Council operations will use at least 60 per cent of electricity sourced from renewables.**



**By 2030, identified urban heat island affected precincts will have been cooled by an average temperature of 2°C (compared to 2019 levels).**



**By 2030, at least 40 per cent of the City of Ryde will have tree canopy cover, which is an overall increase on 2019 levels.**



**By 2030, there will have been no net increase of Council's annual potable water use based upon 2018 levels.**



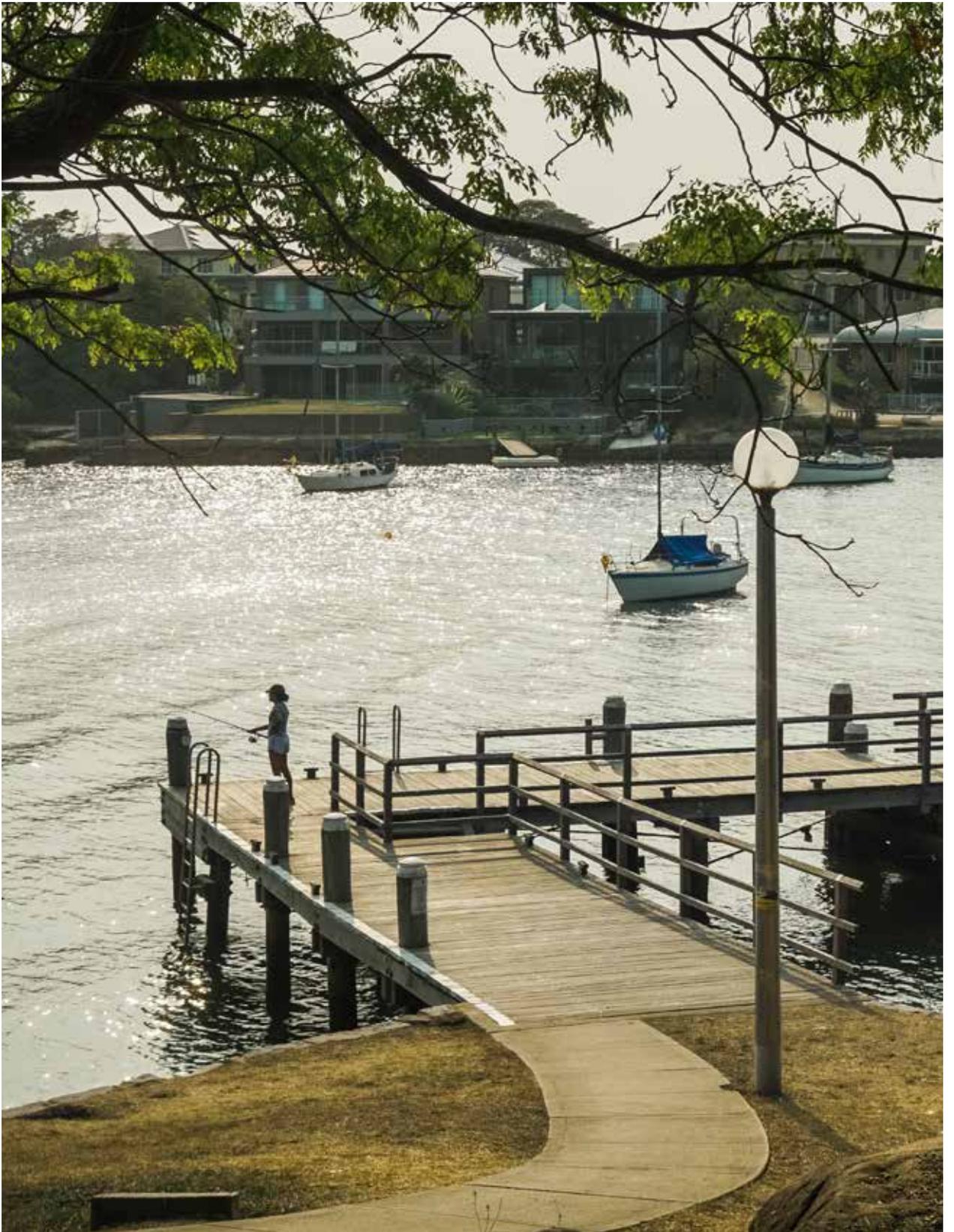
**By 2025, local communities will be able to enjoy swimming or other water recreation activities at one location along the Parramatta River within the City of Ryde.**



**By 2025, waste going to landfill will be reduced by at least 20 per cent (kg/capita) from 2018 levels.**



**By 2030, 100% of City of Ryde fleet vehicles will have transitioned to low emission (or better).**



Banjo Paterson Park

## 5.2.5 Planning priorities and actions

**Table 31** Environment: planning priorities and actions

Planning priority	Actions
<b>E1 Protect and enhance bushland, biodiversity, environmentally sensitive waterways, scenic and cultural landscapes</b>	E1.1 Manage and protect the conservation significance of native vegetation, urban waterways, biodiversity corridors and urban habitats by implementing Ryde Biodiversity Plan 2016
	E1.2 Manage and protect areas consistent with the City of Ryde's area-specific and generic Plans of Management under Local Government Act 1993
	E1.3 Deliver site-specific foreshore projects via collaboration with relevant government partners based upon cost sharing such as the Ryde River walk, Parramatta River Masterplan and seawalls
	E1.4 Review environmentally sensitive land across the LGA including E1, E2 and E3 Environmental Conservation Zones, including to protect the Shrimptons Creek corridor and threatened species along Epping Road
<b>E2 Increase urban tree canopy cover and deliver 'green grid' connections.</b>	E2.1 Continue to implement the current City of Ryde Street Tree Masterplan and Tree Management Policy and Plan
	E2.2 Collaborate with North District and other councils to implement a regional 'Green Grid' Masterplan aimed at managing and increasing the extent of urban forest canopy cover (across public and private lands)
	E2.3 Increase cooling shade cover to 40 per cent of the LGA to mitigate urban heat island effects
	E2.4 Complete an assets valuation for trees for inclusion in revised Development Control Plan

Planning priority	Actions
<b>E3 Reduce carbon emissions and manage energy, water and waste efficiently</b>	<p>E3.1 Minimise energy consumption of Council's buildings Develop a strategy and policy outlining how City of Ryde will reduce carbon emissions and manage energy, water and waste efficiently across all its operations, for adoption by Council</p> <ul style="list-style-type: none"> <li>– Update the current City of Ryde Water Savings Action Plan</li> <li>– Incorporate holistic quadruple-bottom-line (QBL) sustainability across all Council operations, projects and instruments (local and regional).</li> </ul> <p>E3.2 Develop a Renewable Energy Pathway that complements the state target of Net Zero Emissions by 2050</p> <p>E3.3 Review the energy smart water wise section of the Ryde Development Control Plan 2014</p> <p>E3.4 Review waste policies and planning controls in the Ryde Development Control Plan 2014 and in Ryde Local Environmental Plan 2014</p> <p>E3.5 Develop a strategy to transition to low emission transport</p> <p>E3.6 Trial and evaluate charging stations sourced from renewable energy (or carbon offsets) at key locations in the LGA to encourage the take up to electric vehicles</p> <p>E3.7 Transport demand management initiatives including working from home, improved walking and cycling, improved access to car sharing, carpooling and on-demand transport will also be considered in helping to achieve net zero greenhouse gas emissions.</p>
<b>E4 Protect and improve the health and enjoyment of the City of Ryde's waterways</b>	<p>E4.1 Develop a Water Strategy for the City of Ryde which aims to minimise potable water consumption and manage stormwater runoff and contamination</p> <p>E4.2 Implement the Parramatta River Masterplan in collaboration with other members of the Parramatta River Catchment Group</p>
<b>E5 Provide waste and recycling infrastructure that is designed to ensure safety, efficiency and accessibility of waste, reuse and recycling services, and that does not compromise the public domain</b>	<p>E5.1 Review and amend planning controls in the Ryde Local Environmental Plan 2014 and Ryde Development Control Plan 2014 to ensure they require new developments to have appropriately designed on-site storage for waste and recycling services, and provide for the separation of waste materials to encourage recycling and reuse</p>
<b>E6 Improve waste processing to reduce landfill</b>	<p>E6.1 Investigate new and alternative methods of resource recovery</p> <p>E6.2 Work with the NSW Government to identify and secure suitable regional waste and recycling facilities to receive, treat and process domestic waste, in order to improve transportation efficiencies and reduce environmental impacts</p>

## 5.2.6 Case studies

### Solar powered Ryde

The City of Ryde has enthusiastically embraced cleaner renewable energy sources as part of our commitment to building a more resilient community and reducing our environmental impact.

Solar panels have been installed on many of energy-intensive buildings, including the Ryde Aquatic Leisure Centre, the North Ryde Library and Community Centre and the Eastwood Community Hall.

Together, that's over 1000 solar panels producing 340kW of electricity ever year, saving Council over \$40,000 in yearly energy bills and reducing the amount of carbon released into the atmosphere several thousand kilograms per annum.



Solar panels on North Ryde Community Library

### Creative Ryde

The Sustainable Waste2Art Prize (or SWAP) is an annual competition run by the City of Ryde to promote environmental awareness and creative waste reduction. Community members are invited to exhibit artworks that are made from reclaimed materials and feature sustainable living or waste reduction themes.

In 2018, Council ran six free workshops to help the community prepare their sculptures, collages, objects and textile artworks, and received over 200 entries to the competition. A panel of judges, including professional artists and environmental activists, selected the best 80 artworks for public exhibition and awarded \$2,500 in prize money to winners.

Selection for the exhibition is based on innovative use or upcycling (creating a better quality object or one of higher environmental value) of waste materials in the art or design.



Sustainable Waste2Art Competition

## 5.3 Resilience

### 5.3.1 Vision

The City of Ryde and its community will have the capacity to survive, adapt and thrive in the face of acute shocks and chronic stresses. We will take an inclusive ‘one city’ approach based on good governance, engagement and capacity to become a resilient and adaptable local community and region. Every person living and working in the City of Ryde will feel they belong, are valued and supported in navigating our changing local and global environment.

### 5.3.2 Context

A resilient city is one in which everyone – including residents, businesses and those in leadership – understands the challenges they face, is prepared to respond to the challenges, as and when they arise, and has the capacity to thrive in spite of them.

Natural hazards associated with climate change are expected to intensify. This includes heatwaves and increased frequency of hot days, bushfires, extreme rainfall events and short duration high intensity storms. Apart from threats to critical infrastructure and properties, these events may affect the health, well-being and quality of living for residents, workers and visitors to the LGA.

Good planning and collaboration between Council and the community will help to ensure our neighbourhoods, urban areas and infrastructure are better prepared for, and more resilient to, the effects of climate change and other threats. Council is committed to helping Australia meet its international obligations under the 2015 Paris Agreement. This will also help to restrict the impacts and long-term cost burden of climate change to Council and the community.

This chapter of the LSPS outlines how Council’s approach to planning will build the knowledge, capacity and resources of our community to withstand the likely shocks and stresses that may impact our LGA over the next 20 years.

### 5.3.3 Key challenges

- Managing the consequential risks from shocks and stresses and ensuring adequate access to transport, affordable housing, education and employment opportunities are available across the LGA.
- Providing adequate access to clean air and water, natural environments and adaptive technology throughout the City of Ryde for climate comfort and safety, health, mobility and connectivity.
- Ensuring residents and organisations within the City of Ryde understand the complex and sometimes technical risks of climate change and how to work together to provide long term responses, based upon social cohesion, collaboration and collective leadership.
- Our LGA covers a large geographical area with unique and varying natural and built environments. Further, we enjoy a diverse community of residents and workers of varying ages, abilities and cultural backgrounds. Council needs to plan a cohesive response that considers our diverse needs to facilitate and build capacity in preparedness for, response to, and recovery from disasters and emergency situations.



West Parade and Eastwood Park flood 1984

### 5.3.4 Targets

The following targets will guide future developments, Council policies and programs.



**There will be 10,000 resilience ready City of Ryde residents by 2025.**



**There will be 50 resilient organisations located in the City of Ryde by 2025.**

### 5.3.5 Planning priorities and actions

**Table 32** Resilience: planning priorities and actions

Planning priority	Actions
<b>R1 Manage acute shocks (such as disasters and chronic stresses including climate change) by planning collaboratively for resilience and adaptation</b>	<p>R1.1 Prepare and update Council plans and policies that include actions for residential living, energy and water use, resources efficiency, environmental protection, connectivity, social cohesion and inclusion</p> <ul style="list-style-type: none"> <li>– Address resilience in future revisions of the Ryde Community Strategic Plan</li> <li>– Amend the Ryde Local Environmental Plan 2014 and Ryde Development Control Plan to incorporate controls to address resilience</li> </ul> <p>R1.2 Prepare and implement a City of Ryde Local Resilience Plan which covers eight key action areas:</p> <ul style="list-style-type: none"> <li>– Energy efficiency and a low carbon City of Ryde</li> <li>– Water efficiency and quality</li> <li>– Resources efficiency</li> <li>– Climate change, extreme weather events and other natural hazards</li> <li>– Biodiversity and natural systems</li> <li>– Transport and connectivity</li> <li>– Community health and well-being (including air quality and noise)</li> <li>– Direction, collective leadership and collaboration</li> </ul>
<b>E5 Adapt to the impacts of urban and natural hazards and climate change</b>	<p>E5.1 Prepare Climate Risk Assessment Plan for City of Ryde</p>

## 5.3.6 Case studies

### Parramatta River Masterplan

The City of Ryde Council is a member of the Parramatta River Catchment Group. This group is made up of Sydney Water, NSW government agencies and eleven local councils working together to improve the health of the Parramatta River.

In 2018, the group released the Parramatta River Masterplan outlining ten steps to make the river swimmable by the year 2025. The Masterplan also features the development of three new swimming sites along the River, including one at Putney Park in the south of the City of Ryde LGA.

City of Ryde Council's involvement in delivering the Parramatta River Masterplan includes:

- continuing to facilitate and promote Ryde River Walk (which aims to improve foreshore access and recreational opportunities)
- ensuring water sensitive urban design features in new developments
- continuing our Catchment Connections program (involving festivals, guided walks, workshops and school presentations) in collaboration with community groups
- recommencing the River to River urban wildlife corridor project
- a seven-year water quality monitoring project.
- upgrading and repairing Parramatta River seawalls
- extensive creek restoration.



**Figure 31** Parramatta River Masterplan