



Let's Play!

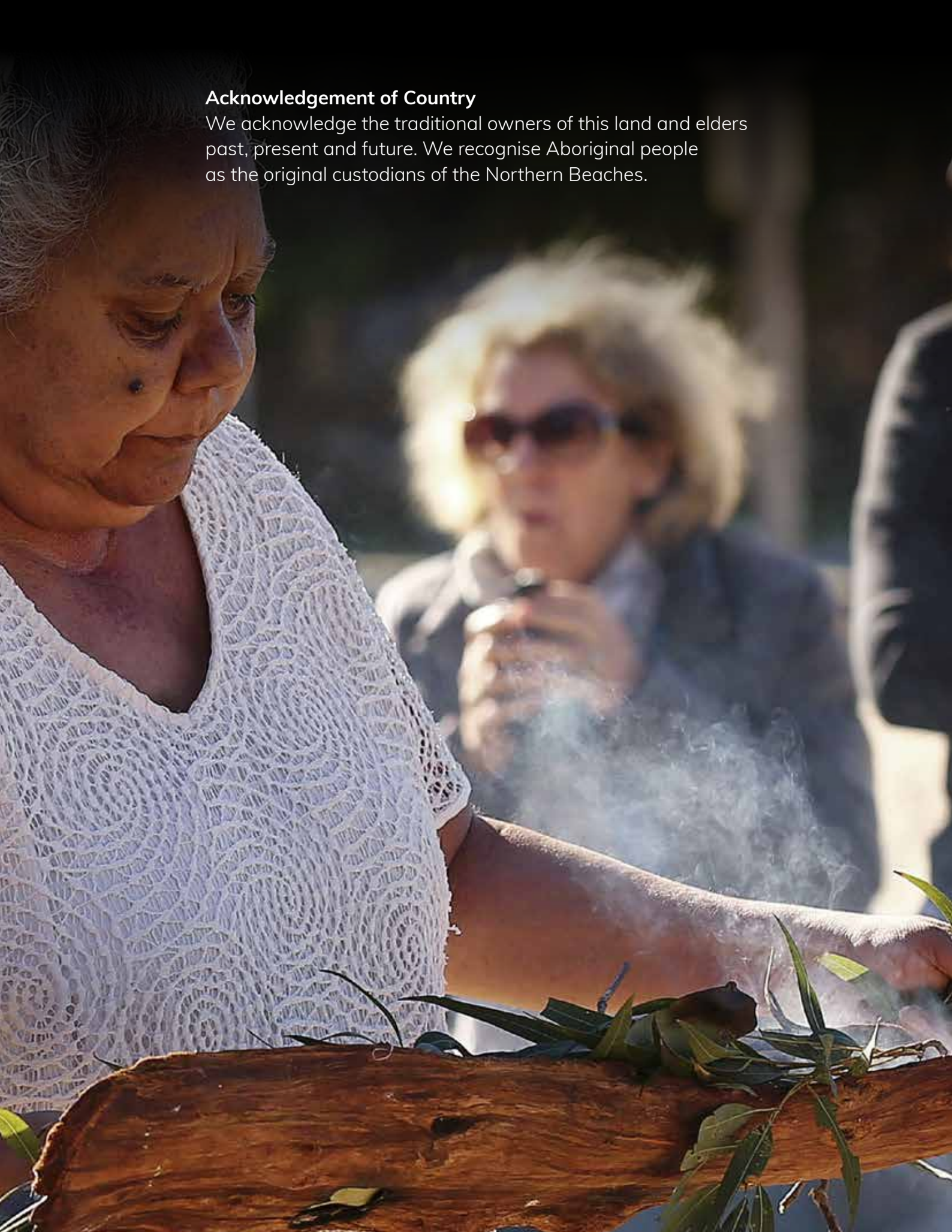
Northern Beaches Open Space
and Outdoor Recreation
Strategy and Action Plan
Adopted December 2022



northern
beaches
council

Acknowledgement of Country

We acknowledge the traditional owners of this land and elders past, present and future. We recognise Aboriginal people as the original custodians of the Northern Beaches.



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Message from the Mayor



There is no place quite like the Northern Beaches.

We love our outdoor lifestyle and we are fortunate to have access to parks, beaches, bushland and recreation facilities. Our community's wellbeing is very much linked to the access of our quality open spaces and facilities.

Let's Play! our Northern Beaches Open Space and Recreation Strategy and Action Plan is Council's roadmap to achieving the open space and outdoor recreation facility needs of our community now and into the future.

The Strategy's Action Plan outlines a financially prudent and environmentally conscious approach to provide for the future through the staged implementation of some 200 actions over the next 15 years. The Strategy will also guide Council's planning and management of all our open spaces and facilities.

I am very grateful to the many individuals and community groups who contributed their views and ideas during the extensive community engagement for the Strategy.

Your involvement has ensured that this Strategy reflects community priorities and aspirations and provides the foundation of the Strategy including:

- a diversity of recreation opportunities
- access to nature
- environmental sustainability
- wellbeing benefits
- proximity to open spaces, nature and views.

The Northern Beaches Open Space and Recreation Strategy and Action Plan affirms Council's commitment to providing high quality recreation opportunities and open space for the whole community and I encourage everyone to continue to work with us and bring 'Let's Play' to life.

Michael Regan
Mayor



Executive summary

With vast tracts of open space including parkland, beaches and bushland, Northern Beaches residents and visitors are spoilt for choice when it comes to opportunities to engage with open spaces and to participate in a wide variety of recreation activities. From swimming and surfing along our coast, to off road cycling and horse riding through bushland, from walking or running in a variety of settings, to enjoying our facilities such as playgrounds, outdoor courts and skate parks. Quiet time in nature and on our beaches is also much valued in our community.

Using a catchment planning approach consistent with other Council planning documents, this Northern Beaches Open Space and Outdoor Recreation Strategy (Strategy) and Action Plan analyses the current provision of open space and recreation facilities and makes recommendations to guide how we can continue to meet the recreational needs of residents and visitors over the next 15 years. Progress on the implementation of the Action Plan is dependent on available funding and planning approvals and is intended to be reviewed and updated every five years.

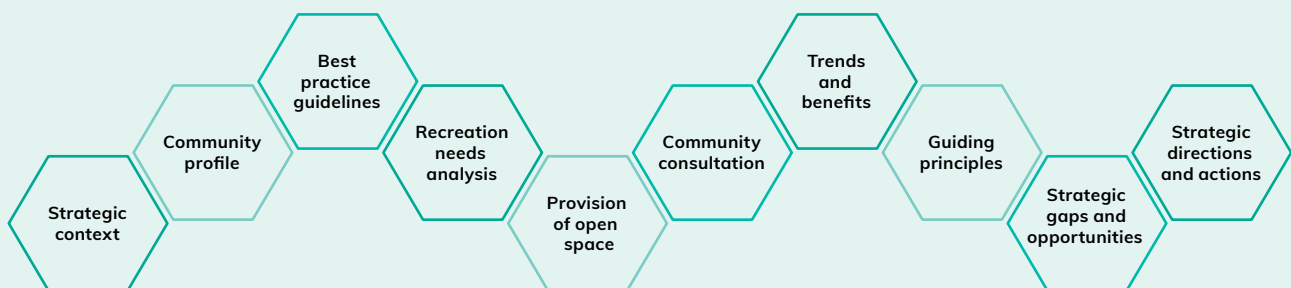
The Strategy considers the changing community demographics, best practice guidelines and trends and benefits that are unique to the Northern Beaches as well as those documented in relevant literature. Some of the key trends outlined include:

- providing a network of interconnected spaces
- supporting healthy living and mental and physical wellbeing
- multipurpose and flexible spaces and facilities
- consideration of quality and amenity in design, maintenance and management (e.g. look and feel)
- realising the full potential of existing open spaces

Although it is difficult to benchmark and compare against other metropolitan Councils with differing environments, research undertaken for this Strategy found that the Northern Beaches is well supplied in terms of quantity of open space and variety of recreation facilities.

Figure 1

Elements of the Northern Beaches Open Space and Outdoor Recreation Strategy and Action Plan



To assist with the gap analysis and to ensure a thorough understanding of recreational needs, a range of consultation methods were employed, including: Social Pinpoint idea mapping; resident telephone survey; off road cycling rider survey; targeted stakeholder workshops and meetings; online consultation via Your Say and written submissions. Consultation activities targeted children, youth, seniors, the disability sector, mental health sector, State Park advisory committees, Council Strategic Reference Groups, resident and special interest groups, various recreation groups as well as the general community.

Overall, engagement activities confirmed that residents' value and appreciate:

- a diversity of recreation opportunities
- access to nature
- environmental sustainability
- wellbeing benefits and
- proximity to open spaces, nature and views.

Suggested improvements include:

- higher quality of open spaces, supporting infrastructure and amenities
- better connectivity of walking and cycling trails
- more inclusive spaces
- playspaces that meet needs
- new and improved opportunities for off road cycling
- additional facilities such as more basketball hoops and outdoor fitness equipment
- cleaner and better maintained open spaces and facilities.

Results of the telephone survey (random stratified survey of residents aged 15 years and over), confirmed variations in participation of certain recreation activities according to where people live. People living in the coastal planning catchments (Manly, Brookvale-Dee Why and Mona Vale) go to the beach more often and are more likely to participate in water based activities. People living in predominantly bushland planning catchments (Frenchs Forest and Terrey Hills) recreate more often in bushland focused activities such as bushwalking and off road cycling. Most residents enjoy activities in both environments to some degree.

The review of facility provision also found variations in distribution across the different planning catchments compared to people's interests. A key focus that emerged was the growing participation in off road cycling and unmet needs of the varying disciplines and skill levels, particularly in the Mona Vale and Brookvale-Dee Why catchments where there are currently no authorised off road cycling facilities. The growing demand for off road cycling goes some way towards explaining the increase in unauthorised trail development which is often environmentally damaging, costly to remove and rehabilitate and Council's efforts to close the tracks are more often than not unsuccessful. Improved provision of off road cycling facilities as recommended in this Strategy is aimed at better meeting the needs of riders and reducing the need for the development of unauthorised trails.

A detailed analysis of the distribution and condition of Council's 217 public playgrounds has been undertaken to inform the Action Plan, with consideration given to inclusivity, diversity, quality and walkability. Again there were discrepancies found in the equity of provision of playgrounds across the five planning catchments. This ranged from a ratio of 0.7 playgrounds per 1,300 people in the Brookvale-Dee Why planning catchment to 2.0 playgrounds per 1,300 people in the Terrey Hills catchment. Manly, Frenchs Forest and Mona Vale planning catchments have 1.0, 1.8 and 1.1 playgrounds per 1,300 people respectively. While considering the differing needs and interests of residents living in each catchment, there is an opportunity to focus playground upgrades in areas that service a large number of people, while ensuring continued provision in areas with barriers to walkability (e.g. main roads or steep hills) and where alternate recreation opportunities are limited.

Through changes to living and working due to COVID-19, our open spaces and recreation facilities have become even more popular and more highly valued. This has put additional strain on the management and maintenance of facilities, including trails, beaches and associated facilities and amenities. In the context of COVID-19 and through the development of this Strategy and Action Plan our priorities have been reviewed.

This document is linked to the State Government and Council strategic planning frameworks and draws on the open space principles developed for the Northern Beaches Local Strategic Planning Statement (2020). The strategic directions and actions respond to the needs identified in this document as well as existing commitments from the three former Council's various plans and strategies as well as current Council initiatives, including the Northern Beaches Resilience Strategy which highlights that a resilient community is cohesive, connected and engaged. This Strategy also supports the implementation of related Council documents such as the Disability and Inclusion Action Plan. All actions fall under one of the following Strategic Directions:

- 1. Inform and Understand**
- 2. Links and Loops**
- 3. Better and Brighter**
- 4. Growth and Gaps**
- 5. Management and Planning**

6. Ongoing Maintenance

With almost 200 actions, some of the key priorities identified include:

- providing 7 new playgrounds at: Parkes Road Reserve in Collaroy Plateau; Ashley Reserve in Fairlight; Brick Pit Reserve in Frenchs Forest; Fielding Reserve in Collaroy; Condoover Reserve in North Balgowlah; Forestville Park; and McDonald Street Road Reserve in North Manly.
- prioritising playspace upgrades to offer higher quality and diverse play experience that benefit a broad range of people, rather than smaller playgrounds/playspaces that service a smaller catchment. This may include alternate facilities for older children and youth such as ninja style play, bouldering walls, bike parks and basketball facilities
- developing new and improved off road cycling facilities for a broad range of interests and skills, including improvements to the Manly Warringah War Memorial State Park (Manly Dam) mountain bike trail, new bike parks, formalising some unauthorised trails and continuing to work with the NSW National Parks and Wildlife Service (NPWS) on additional cross tenure trails
- installing outdoor fitness equipment and basketball/netball/multi-use courts at appropriate locations and where there is demand
- improving maintenance regimes (particularly in key areas and during periods of high use) to increase the standard of service to provide a higher quality and more consistent experience e.g. toilet cleaning and maintenance, park furniture and facilities maintenance, rubbish collection, trail maintenance, management of long grass and weeds
- reviewing sportsground amenities and identifying opportunities for improved facilities
- Developing a Dogs in Public Places Policy (Dog Policy) in consultation with the community and identifying opportunities to improve the provision of quality spaces for people to enjoy time outdoors with their dogs
- improving green/recreational grid connectivity between open spaces, town centres schools, public transport and other key locations
- continuing to support the sustainable recreational use of bushland and managing edge effects
- continuing supporting parks, garden and trail volunteers
- continuing to partner with the NSW State Government regarding shared access of school grounds and facilities and new parks
- undertaking an Indoor Sport and Recreation Needs Study.
- continue to seek funding from other tiers of government and explore corporate sector and other funding opportunities.

1.0 Introduction

This Strategy provides an analysis of recreational needs and associated strategic directions and actions for the planning and management of open space in the Northern Beaches over the next 15 years. It includes the findings from research, consultation and data analysis that have informed the development of six Strategic Directions and almost 200 Actions.

This Strategy provides a consistent framework for managing open space and outdoor recreation facilities and improvements across the Northern Beaches Local Government Area (LGA).

Assessment of current open space and outdoor recreation facility provision and needs and recommendations for improvements has been classified by locations across five planning catchments to ensure a localised approach and consistency with other Council planning frameworks and documentation.

The five planning catchments and corresponding suburbs are:

- **Manly**
Manly, Fairlight, Balgowlah, Balgowlah Heights, Clontarf, Seaforth, Manly Vale, Allambie Heights.
- **Frenchs Forest**
Frenchs Forest, Belrose, Forestville, Killarney Heights, Davidson, Oxford Falls.
- **Brookvale-Dee Why**
Brookvale, Freshwater, Dee Why, North Curl Curl, Beacon Hill, Narrabeena, Cromer, Wheeler Heights, North Narrabeen Narrabeen, Collaroy Plateau, Collaroy, Dee Why Beach, Curl Curl, North Manly, Queenscliff.
- **Mona Vale**
Mona Vale, Warriewood, Newport, Bilgola Plateau, Bilgola Beach, Bayview, Elanora Heights, Avalon Beach, Palm Beach, Clareville, Church Point, Ingleside, Whale Beach, Scotland Island, McCarrs Creek, Lovett Bay, Morning Bay, Coasters Retreat, Great Mackerel Beach, Currawong Beach, Elvina Bay.
- **Terrey Hills**
Terrey Hills, Duffys Forest, Cottage Point.

The following pages provide an outline of the Strategy development methodology and an overview of the Northern Beaches recreation facilities and open spaces.

The process for preparing this Strategy and the Action Plan is shown below. The research, analysis and consultation stages were undertaken concurrently to assist Council in identifying community needs and gaps, as well as to provide Council with a set of integrated and practical recommendations which respond to the local context. A summary of consultation activities and outcomes are provided section 3.4 and Appendix C.



Limitations

This study was undertaken from December 2019 - May 2022 and has been refined over this time. The open space data contained in this report is based on the best available data at the time. This data may be subject to change as part of Council's continual monitoring and review processes.

Recreation facilities and spaces

The process for preparing this Strategy and the Action Plan is shown below. The research, analysis and consultation stages were undertaken concurrently to assist Council in identifying community needs and gaps, as well as to provide Council with a set of integrated and practical recommendations which respond to the local context. A summary of consultation activities and outcomes are provided section 3.4 and Appendix C.

Major spaces

The Northern Beaches boasts some major recreation open spaces that facilitate opportunities for participation in diverse activities. Our key natural areas and beach and foreshore areas include:

- **Two National Parks**
Kur-Ring-Gai Chase and Garigal.
- **Three State Parks**
Narrabeen Lagoon, Manly Warringah War Memorial Park (Manly Dam) and Currawong.
- **24 ocean beaches**
from Palm Beach in the north to Shelley Beach in the south.
- **Two National Surfing Reserves**
Manly-Freshwater (also World) and North Narrabeen
- **Harbour and waterway beaches and facilities**
from Station Beach on Pittwater to Little Manly Beach and Clontarf.
- **Waterways and Aquatic Reserves**
such as Pittwater and Long Reef.

These open spaces contribute to both the local and greater Sydney recreation and green grids that provide connectivity between places that benefit the movement of wildlife and people through nature. Significant recreation connections include the Palm Beach to Manly Coast Walk and key sections of the Bondi to Manly and Harbour to Hawkesbury walks.

Facilities

Open space in the Northern Beaches support various facilities for a range of community, recreational and leisure activities. Recreation and leisure facilities have been grouped into seven categories outlined below.

Play spaces

Spaces that predominately focus on supporting play activities for younger and older children. Playspaces include equipment or specialised areas to support different activities, such as nature play, adventure play or water play. While focussed on children, playspaces are for everyone. Playspaces provide vital areas for families, parents, carers and the 'young at heart' to socialise, be creative and take part in physical activity.

Sport

Facilities and spaces that support formalised sporting and recreational opportunities include sports fields, indoor and outdoor courts, aquatic facilities, bowling clubs and horse arenas. Sportsfields and some courts are public open spaces when not used for sport. They may include amenities, change facilities and buildings. (Note, recommendations for these spaces are largely excluded from this study as the future of these spaces is addressed in the Northern Beaches Sportsgrounds Strategy 2017. Indoor sports and recreation will also be considered in more detail in future studies).

Trails and paths

Facilities and spaces that support walking, cycling and running in public open space, natural areas and community destinations. These include walking and running paths, cycle ways, bushwalking tracks, off road cycling and fire trails.

Fitness and exercise equipment

Free and accessible outdoor exercise equipment that support public exercise and fitness opportunities.

Animal exercise

Trails and spaces for horse sports, as well as spaces that provide access to off-leash areas for dogs.

Skate and bike parks

An outdoor area having structures and surfaces that can support skateboarding, scootering, roller-skating and/or off-road cycling activities.

Courts

Hard surface facilities that support either single or shared/multi-use such as for basketball, netball, tennis, pickleball, learn to ride, roller-skating and skateboarding.

Gardens

A space where people in the surrounding neighbourhood and visitors share the work to maintain a garden space for growing fruits, vegetables, flowers or other plants, or simply as a place to relax and enjoy.

Golf courses

Areas of public land dedicated for playing golf. This study only considers Council-managed golf courses, to gain an understanding of the breadth of publicly accessible recreational facilities.

Participation in recreation activities

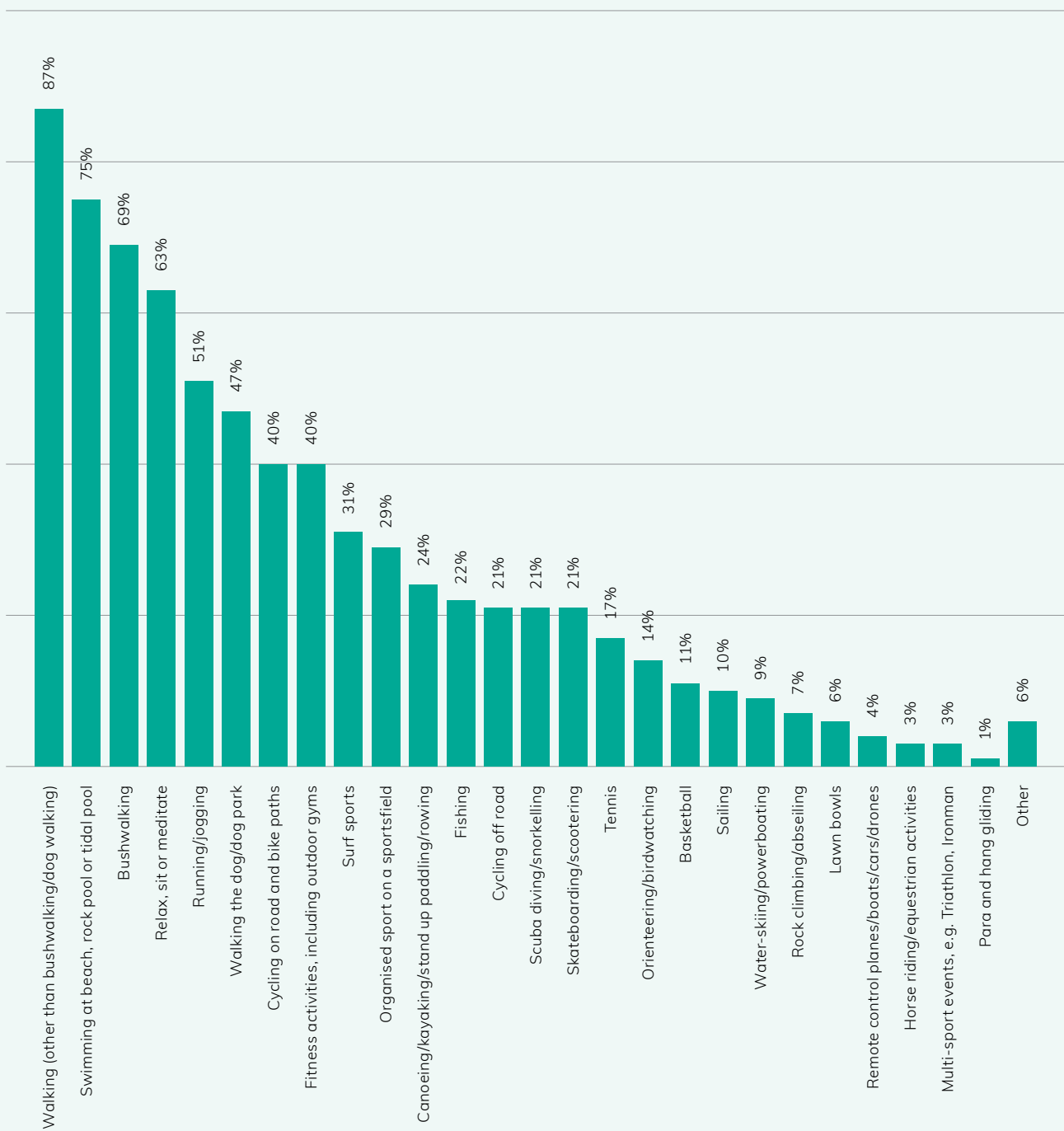
Our community participate in a very diverse range of recreation activities on the Northern Beaches which is reflective of the recreation environments available. According to the telephone survey many of the most common recreation activities make use of our tracks and trails and beach areas, with walking and swimming ranked first and second respectively (see Figure 2).

Throughout the COVID-19 restrictions in 2020 and 2021 many recreation and sporting facilities were closed or access limited at various times which has impacted participation. At the time the telephone survey was conducted (July 2020) participation in multi- person/team activities decreased or stopped altogether. The highest levels of increased participation was in unstructured recreation activities such as walking, bushwalking, running/jogging and walking the dog. During the COVID-19 restrictions Council increased opportunities for use of some facilities by turning on lights at certain sportsfields and courts, allowing additional usage time for unstructured activities.

Further recreation participation data can be found in section 3.4 and Appendix C.

Figure 2

Participation in recreation activities over the last 12 months (telephone survey July 2020).



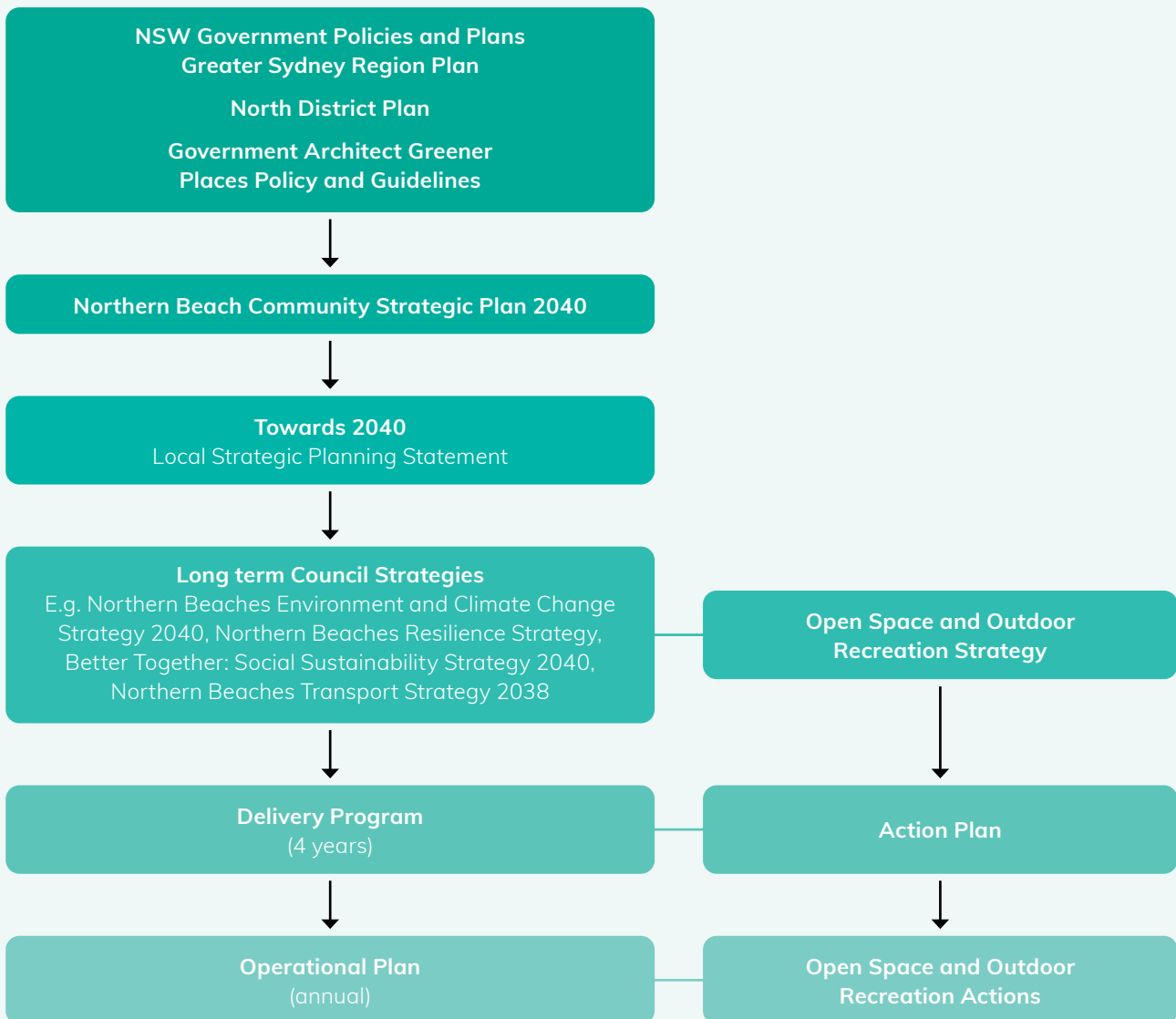
2.0 Strategic context

Council's Open Space and Outdoor Recreation Strategy provides a long-term vision (15 years) for open space on the Northern Beaches in response to community priorities and needs. It is guided by the NSW Government's strategic directions and Council's vision for the Northern Beaches which is:

'Northern Beaches - a safe, diverse, inclusive and connected community that lives in balance with our extraordinary coastal and bushland environment'

(Community Strategic Plan 2040)

The relevant State and Local Government frameworks, strategies, plans and policies have been reviewed. The links are illustrated below. Relevant Council documents are listed in the references.



The open space principles developed for the Northern Beaches Local Strategic Statement (2020) have been reviewed and built upon to guide this Strategy. The principles (see below) underpin open space and outdoor recreation planning and management as well as this Strategy's strategic directions and actions. They are aligned with the direction provided by the NSW Government Architect and Greater Sydney Commission.

Improve the provision, equity, diversity and quality of open space for recreation.

Design open space and recreation facilities to be flexible, versatile, multifunctional and fit for purpose.

Ensure open space and recreation facility provision responds to demand to meet diverse community needs, including for all ages and genders to stay active and connected.

Use open space to connect people to nature.

Ensure open space contributes to, connects and enhances the local recreation and green grid.

Deliver sustainable open spaces that seek to enhance resilience and considers full lifecycle impacts across design, construction, management and maintenance in line with Council's Asset Management Plans

Encourage collaboration and partnerships to promote shared use.

Design vibrant, inclusive, accessible and interactive open spaces.

Support rooftop parks, increased building setbacks and conservation of road space in built-up areas.

Ensure access to natural open space and waterways is sustainable so that these areas are preserved for the future

Locate all new residential development within 400m of open space and all high density areas within 200m of open space

3.0 Recreational needs analysis

Introduction

This section provides the quantitative and qualitative needs analysis that informed the design of the Strategic Directions and Action Plan.

Current provision of open space across the Northern Beaches across the five planning catchments is presented and includes a breakdown of the number of certain types of recreation facilities such as playgrounds, courts, skateparks and bike parks. A specific detailed analysis of Council's 217 public playgrounds (excluding community centres and childcare centres) was undertaken due to the importance of these facilities to our community, the high number of facilities, the need to continue to prioritise improvements with need and best practise. The supply and demand for off road cycling facilities was also reviewed in detail due to the growth of this activity and the ongoing challenges with managing the development of unauthorised trails.

Although not relying on quantitative benchmarks alone, benchmarks are referred to in this section as a guide. This includes consideration of a 400m walkability buffer to gauge accessibility to parks and playgrounds and 200m for high density areas with more than 60 dwellings per hectare. The 200m walkability mapping for high density areas uses ped shed (pedestrian shed) mapping that considered road barriers that are not considered via the 400m walkability buffer mapping.

This section also summarises the key consultation findings. Qualitative data was collected through various consultation activities with a range of stakeholders who provided feedback on what they value and what could be improved. The random stratified telephone survey provides representative qualitative and quantitative data that helps us better understand how people are using open spaces and recreation facilities. The full Community Engagement Report is available at Appendix C.

Together this needs analysis and subsequent Strategic Directions and Action Plan guide how we will continue to meet the recreational needs of residents and visitors over the next 15 years.



Northern Beaches Open Space Classification

The Northern Beaches open space network is made up of a range of different types of open space. A park may be classified as one or more of the following, for example, a district park may be in a foreshore area, or a regional park may be in a natural area.

Local Parks

Located in residential areas and serve the local suburb community. Provide some recreational facilities. Typical facilities: one or more recreation elements such as seating, natural shade, trails or playspace equipment.

Typical size: <0.5 - 2ha

District Parks

Serve a catchment of multiple suburbs and multiple communities. Support diverse uses and provide a range of recreation and sporting activities. Suitable for large community gatherings.

Typical facilities: multiple recreational facilities e.g. playground, organised sport, trails and paths Typical size: >2ha - 5ha

Regional Parks

Serve an area greater than the LGA. Destination spaces that attract visitors from across and outside of the LGA. Include a variety of recreational and sporting facilities and are usually greater than 5ha in size. May include a golf course.

Natural Areas

Bushland reserves and parks maintained primarily for conservation and ecological functions. These areas may also support sustainable recreational infrastructure such as tracks, trails and picnic areas, and provide opportunities to interact with nature. Natural areas include Council managed reserves, State parks and other non-council managed areas, such as National Parks. Sizes are variable.

Beaches and Foreshore Parks

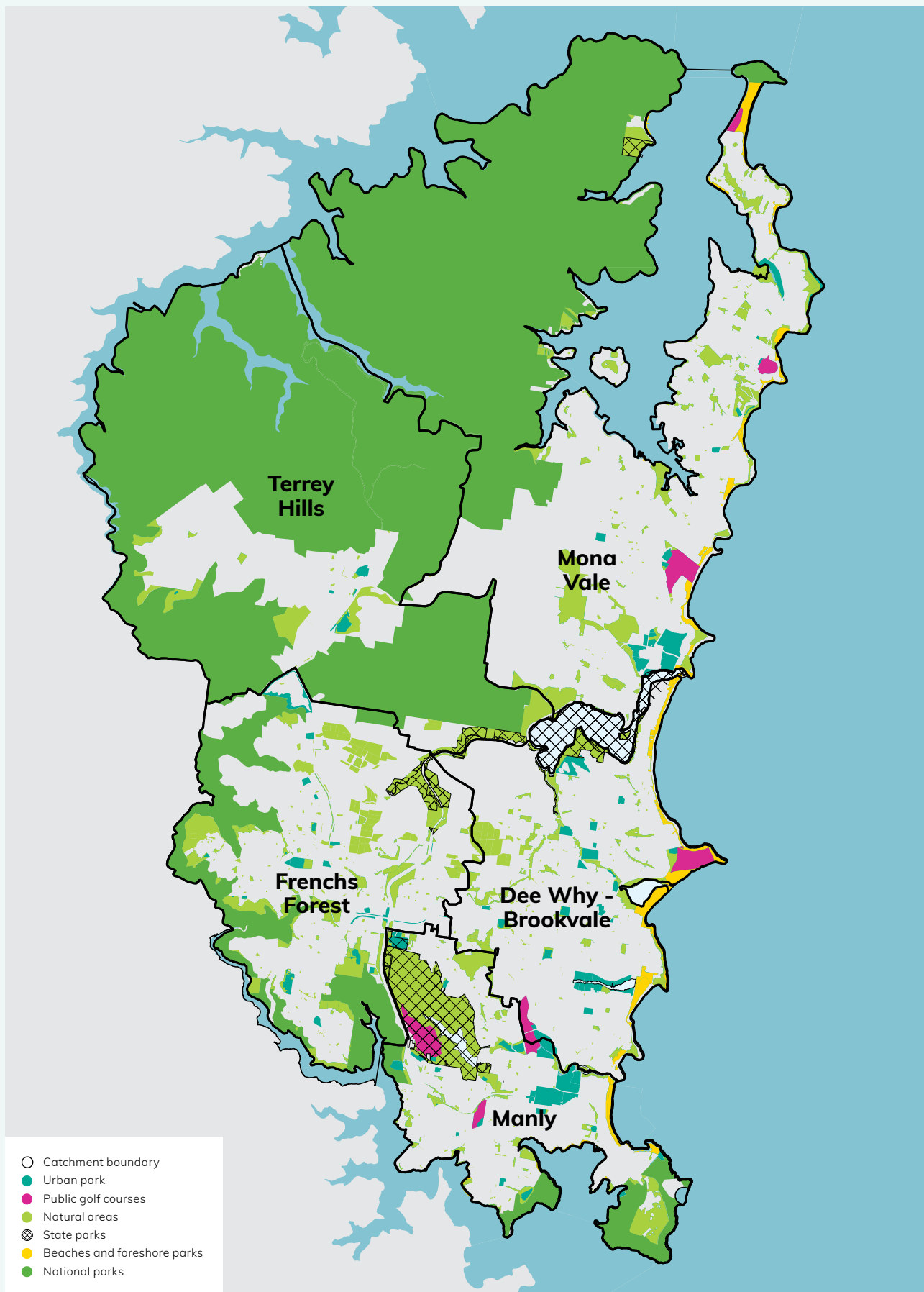
Open spaces adjoining bodies of water that support biodiversity and provide habitat for wildlife while also supporting a range of recreational, social and sporting opportunities such as swimming, play, boating, kayaking, events and surfing. These spaces typically have formal parks or recreational facilities such as playgrounds or outdoor fitness equipment. They also include areas around beaches, rivers, creeks, lakes, wetlands, bays and harbours and rock and tidal pools.

Urban Parks

Parks within a predominantly residential or commercial area. An urban park may occur in many other settings, such as beach and foreshore areas as described above, however, these have been classified separately to allow for comparative mapping and statistical purposes. May include varied sporting and recreation facilities.

Public Domain

Inner urban spaces designed for community gatherings and thoroughfares such as plazas, forecourts, major centres, villages and street scapes. These public spaces are popular event venues and experience high levels of visitation by residents as well as workers and visitors. Sizes are variable. The public domain is not considered as part of this study and falls within the Northern Beaches Public Space Vision and Design Guidelines.



Total open space - 14,501 ha



713 ha

urban parks including sportsgrounds and 183 ha of public golf courses



2,222 ha

natural areas including 793 ha of state parks



221 ha

beaches and foreshore parks



11,427 ha

national parks

Open space diversity

This includes Council owned/managed parks, reserves and natural areas which are listed in Appendix A.



22

regional spaces



88

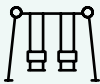
district spaces



100's

local spaces

Recreational facilities



217

playspaces



81

public tennis courts



24

rock and tidal pools



18

basketball facilities



10

skate facilities



9

outdoor fitness areas



7

public golf courses



5

bike parks



5

public bowling clubs



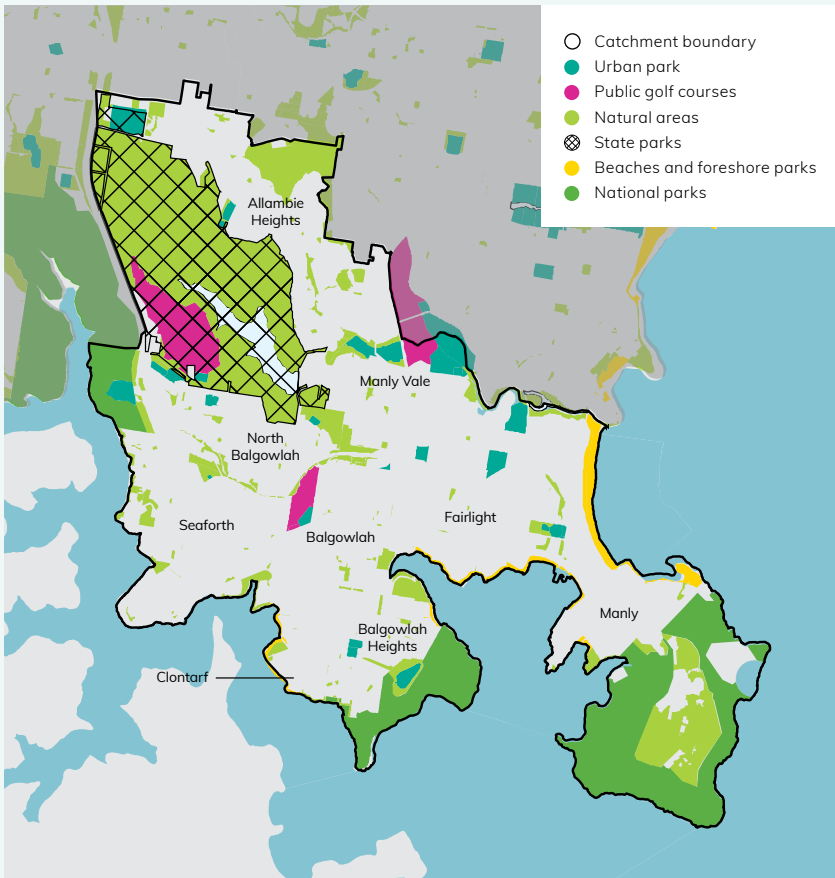
3

horse arenas



1

croquet club



Total open space - 996 ha



147 ha

urban parks including sportgrounds and 56 ha of public golf courses



564 ha

natural areas including 384 ha of state parks



32 ha

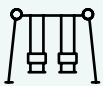
beaches and foreshore parks including 2 rock pools and 6 tidal pools



278 ha

national parks

Recreational facilities



47

playspaces



27

public tennis courts



8

rock and tidal pools



4

basketball facilities



3

outdoor fitness areas



2

skate facilities



2

public bowling clubs



2

public golf courses



1

bike park



1

croquet club

Open space diversity



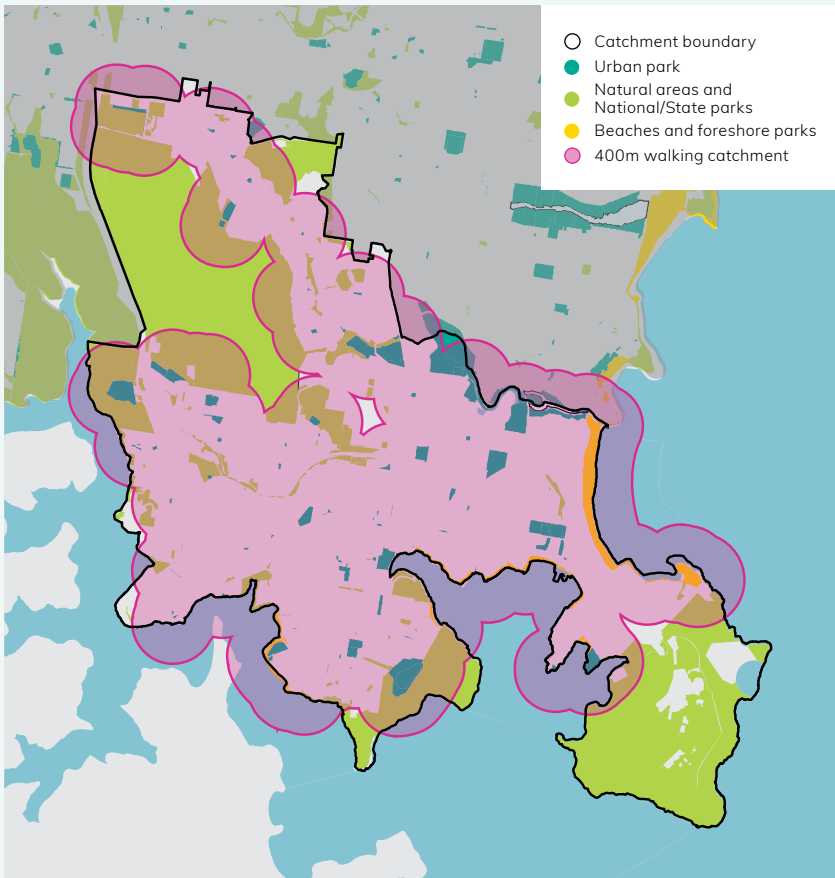
8

regional spaces



18

district spaces



Proximity to open space

The majority of residents are within 400 m walking distance of an urban park or beaches and foreshore areas. There is a small gap in access to the south of Manly Vale, however residents have reasonable walking access to District Park and are near to Manly Dam which provides significant open space amenity and recreational value.

Figure 3 shows the 200m walkability map for the high density parts of the Manly catchment (areas with 60 dwellings or more per hectare) and shows some walkability gaps in Manly Vale, Balgowlah, Fairlight and Manly. Most of these residents have access to various parks, natural areas and beaches, however improvements in either access, quality or quantity of open space needs to be considered where possible.

Current provision analysis

Total provision 2021	Future total provision 2036 *Includes estimated population increase as per section 4.1
15.8 hectares per 1,000 people	15.2 hectares per 1,000 people

Diversity of recreational opportunity

The Manly catchment is well supplied with open space, with national parks and state parks making up the majority of open space in the catchment. These open space areas are generally well embellished with walking trails, picnic areas and amenities to support recreational use. There are also some significant beach and foreshore areas. The most prominent of these open space areas include:

- Manly Warringah War Memorial State Park (Manly Dam)
- Ivanhoe Park including Manly Oval and Ivanhoe Park Botanic Garden
- Sydney Harbour National Park
- Manly Beach and various harbour beaches
- Spit to Manly walkway

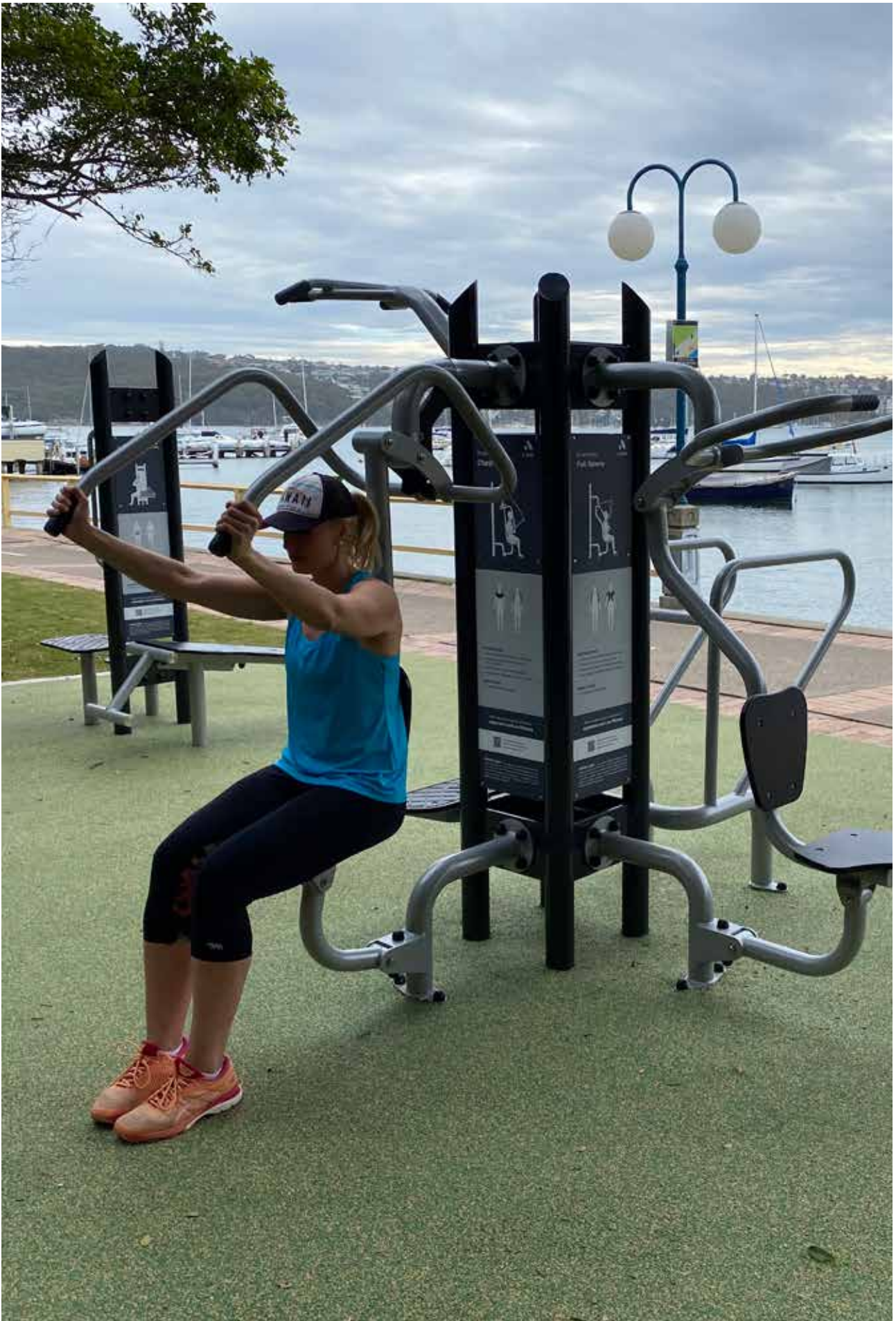
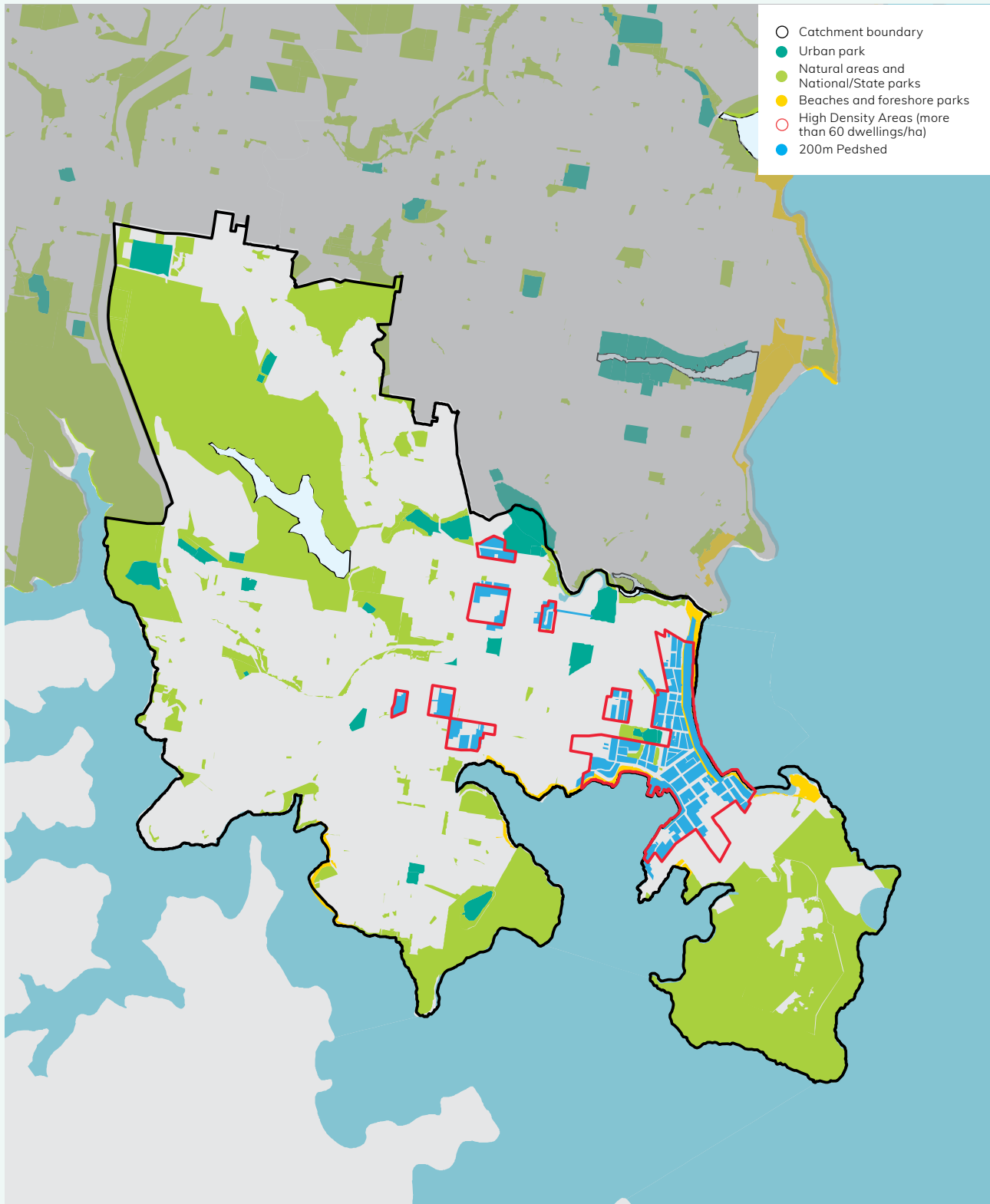
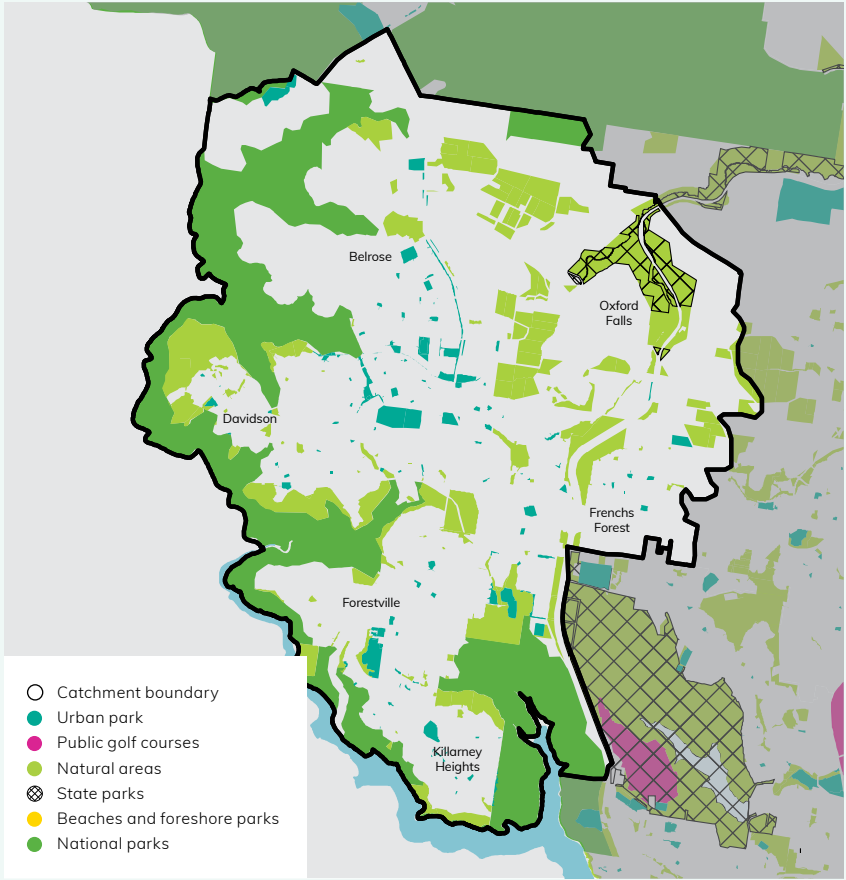


Figure 3

200 metre pedshed mapping for Manly planning catchment. Areas within the red line are considered high density (60 dwellings or more per hectare). Blue areas within the red boundaries have access to open space within 200m. Areas not shaded blue within the red boundaries do not have access to open space within 200m.





Total open space - 1,386 ha



73 ha
urban parks
including sportsgrounds



519 ha
natural areas
including 62 ha of State Parks

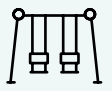


0
beaches and
foreshore parks



794 ha
national parks

Recreational facilities



54
playspaces



14
public tennis
courts



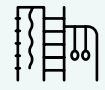
3
skate facilities



2
basketball
facilities



1
bike park

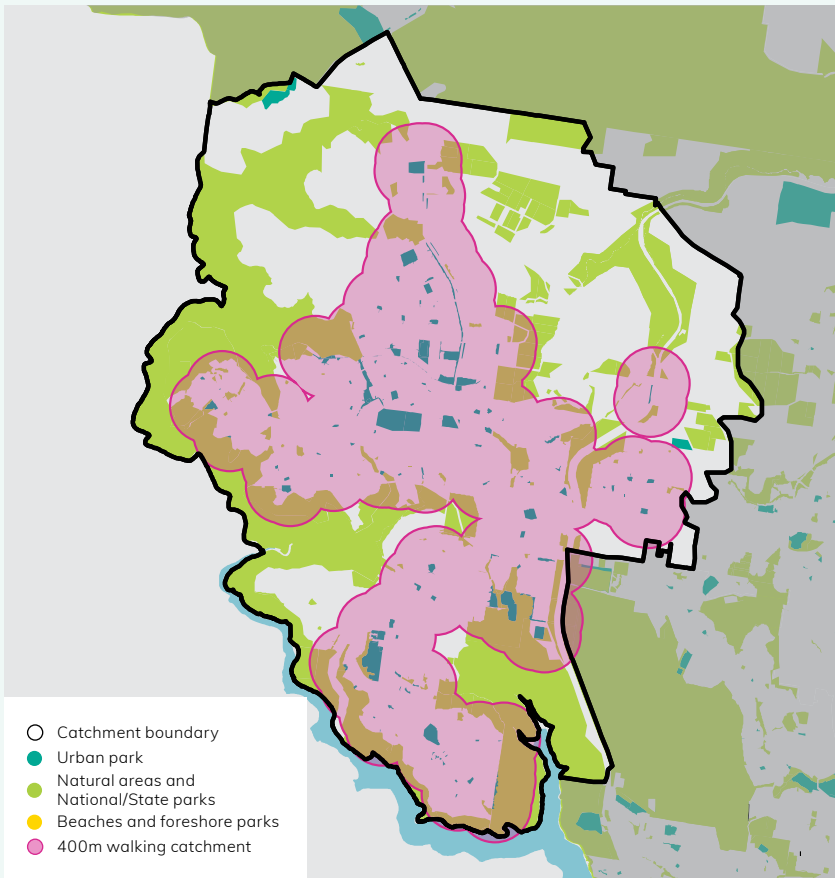


1
outdoor fitness
area

Open space diversity



6
district spaces



Proximity to open space

The majority of residents are within walking distance (400 m) to an urban park.

There are some walkability gaps around western Forestville. The closest urban park to these residents is on the other side of Warringah Road, which poses some accessibility barriers. However, residents in western Forestville still have walking access to open space, with the suburb containing several natural areas, including Garigal National Park and direct access to bush trails.

There are currently no areas within the Frenchs Forest catchment with a density of more than 60 dwellings per hectare, hence 200 m walkability mapping has not been undertaken. However, this should be considered when planning for future growth including around the Northern Beaches hospital precinct.

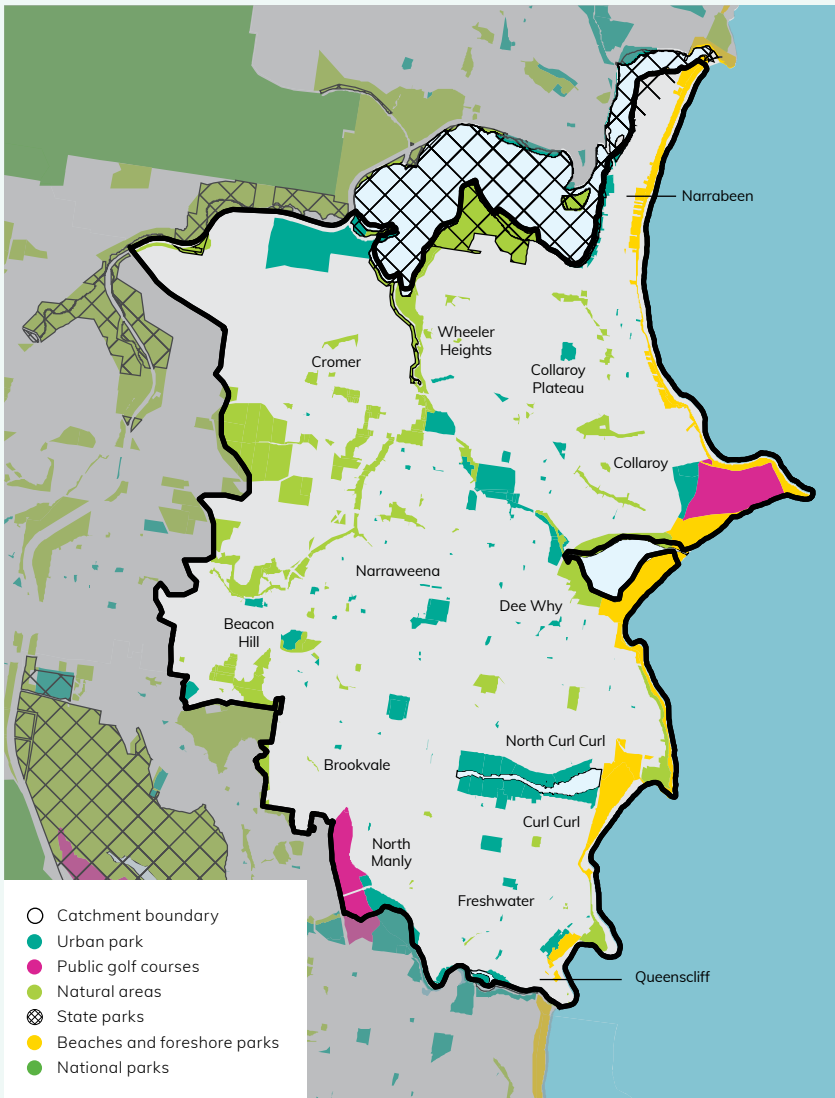
Current provision analysis

Total provision 2021	Future total provision 2036 *Includes estimated population increase as per section 4.1
34.8 hectares per 1,000 people	25.2 hectares per 1,000 people

Diversity of recreational opportunity

Much of the open space in Frenchs Forest consists of natural areas and national parks. Most natural areas contain basic walking trails which connect to residential streets, providing good access for residents. Garigal National Park, in the south of the catchment, provides opportunities for diverse recreational activities including fishing, picnics, cycling and bushwalking.

The catchment has a high proportion of urban parks less than 0.5 ha. Most of these local parks support a playground or sportsfield however some, particularly around Belrose, are smaller lots which in many cases serve as connecting laneways and have limited embellishments. Key sport and recreation areas include Lionel Watts Reserve, Forestville Park and Forestville War Memorial Playing Fields.



Total open space - 831 ha



228 ha

urban parks, including sportsgrounds and 65 ha of golf courses



500 ha

natural areas including 282 ha of state parks



102 ha

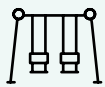
beaches and foreshore parks including 6 rock pools



0

national parks

Recreational facilities



55

playspaces



18

public tennis courts



6

rock and tidal pools



4

basketball facilities



3

outdoor fitness areas



2

skate facilities



2

public golf courses

Open space diversity



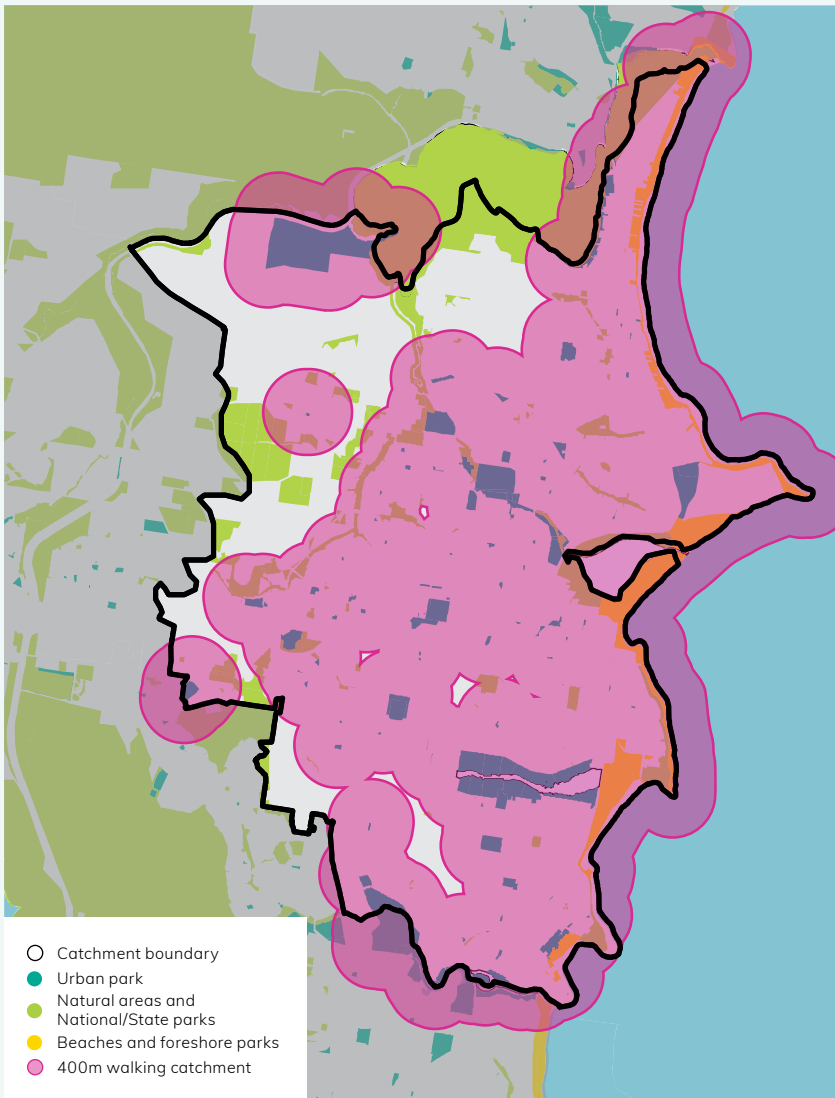
10

regional spaces



25

district spaces



Proximity to open space

The majority of residents are within walking distance (400m) to an urban park or a beach and foreshore park.

The most prominent gap in walkability is north of Pittwater Road in North Manly which has limited open space of any type. The suburb is landlocked and faces some accessibility barriers, with Pittwater Road to the west and an industrial estate to the north.

The high density 200m walkability mapping for Brookvale-Dee Why (Figure 4) shows several areas with more than 60 dwellings per hectare in this catchment. There is a large high density area in Dee Why, with smaller concentrations in Brookvale and Queenscliff, as well as parallel to Collaroy Beach and in Freshwater west of Oliver Street. Overall, 73 percent of dwellings in high density areas of this catchment are within a 200m walk of open space. The largest gaps are in the southern part of Dee Why and near Collaroy Beach. However, these areas have benefited from investment in larger district and regional parks and playspaces within reasonable walking distance including Walter Gors Park in Dee Why and Bruce Bartlett Park in Collaroy as well as significant beach and lagoon areas which would be likely to serve some of residents' recreation needs. Any further growth in the Brookvale area will need to consider access to adequate quantity and quality of open space.

Current provision analysis

Total provision 2021	Future total provision 2036 <small>*Includes estimated population increase as per section 4.1</small>
8.0 hectares per 1,000 people	7.3 hectares per 1,000 people

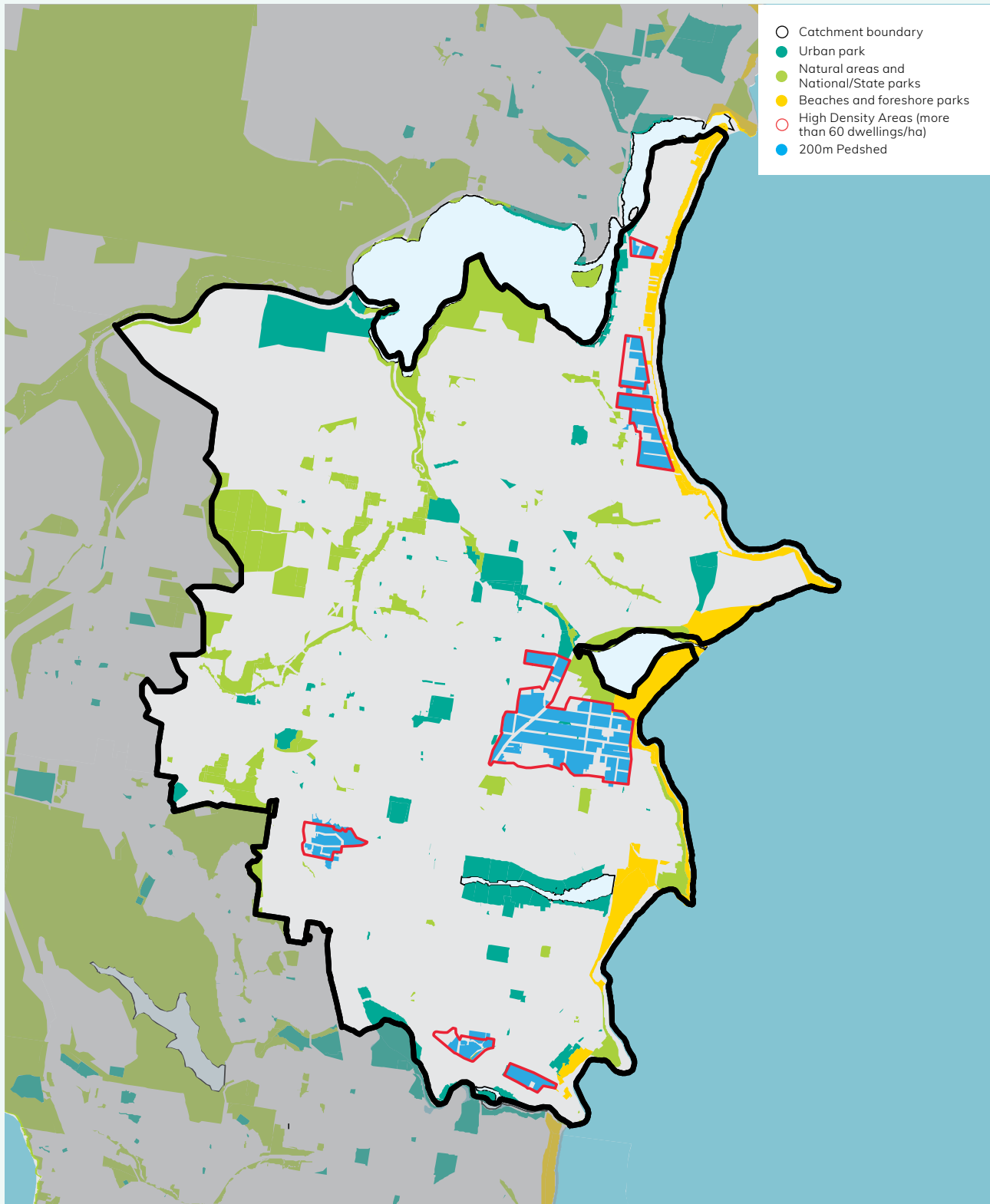
Diversity of recreational opportunity

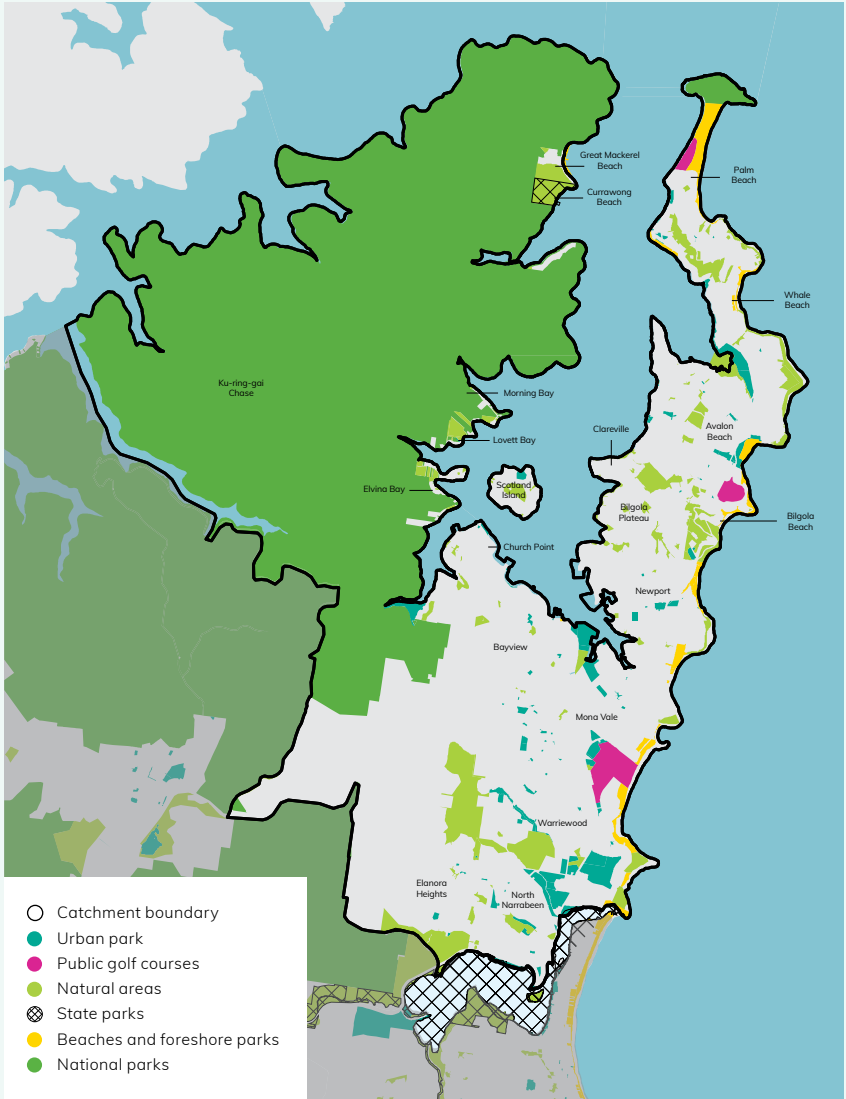
The Brookvale-Dee Why catchment has a large provision of beaches and foreshores areas and is home to some of the LGA's key outdoor sporting and recreation areas including Cromer Park, John Fisher Park, Brookvale Park and District Park/Nolan Reserve. The current distribution of open space reflects the area's housing density, with fewer natural areas around some of the more built up suburbs.



Figure 4

200m pedshed mapping for high density areas in Brookvale-Dee Why catchment. Areas within the red line are considered high density (60 dwellings or more per hectare). Blue areas within the red boundaries have access to open space within 200m. Areas not shaded blue within the red boundaries do not have access to open space within 200m.





Total open space - 5,439 ha



246 ha

urban parks, including sportsgrounds and 62 ha of golf courses



422 ha

natural areas including 26 ha of state parks



87 ha

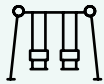
beaches and foreshore parks including 7 rockpools and 3 tidal pools



4,712 ha

national parks

Recreational facilities



56

playspaces



17

public tennis courts



10

rock and tidal pools



7

basketball facilities



3

public golf courses



3

public bowling clubs



2

skate facilities



2

outdoor fitness areas

Open space diversity



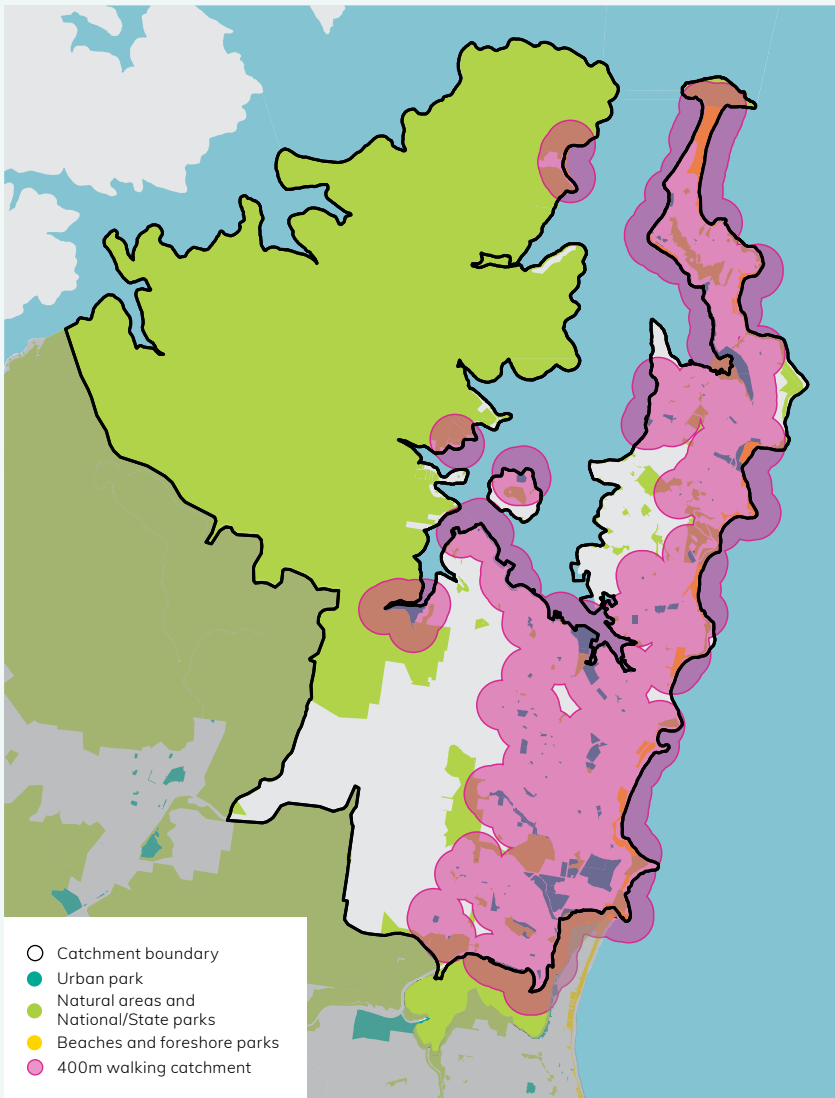
2

regional spaces



39

district spaces



Proximity to open space

The majority of residents are within walking distance (400m) to an urban park or a beach or foreshore park.

The largest walkability gap is along the foreshore along Pittwater south of Clareville which does not contain an urban park. This area is low-density and is bordered by foreshores and natural areas. Many residents here have some degree of foreshore access which would provide significant open space amenity and help supplement this provision.

As shown in the high density 200m walkability map at Figure 5, there is one small area in Newport which has more than 60 dwellings per hectare. Some of the residents of this area are technically more than 200m walking distance from an urban park. They are, however, located close to both Newport Beach and Attunga Reserve, and therefore have access to areas of open space. Any future growth in this catchment such as Mona Vale, Warriewood or Ingleside will need to consider adequate access to quality and quantity of open space on a case by case basis.

Current provision analysis

Total provision 2021	Future total provision 2036
85.2 hectares per 1,000 people	78.8 hectares per 1,000 people

*Includes estimated population increase as per section 4.1, however note that the proposed Ingleside development (an estimated 3,000 people) is no longer proceeding and this will be reflected in future demographic population forecast modelling

Diversity of recreational opportunity

The Mona Vale catchment has a high proportion of natural areas and beaches and foreshores. The open space generally leverages the area’s natural aquatic and bush assets with several natural areas and urban parks providing foreshore access, boat ramps and established walking trails. Some of the significant recreation areas include Pittwater waterway, Ku-ring-gai Chase National Park including Barrenjoey Headland, the Coast Walk, Warriewood Wetlands and the northern side of Narrabeen Lagoon. Other key sport and recreation areas include North Narrabeen Reserve (including Rat Park), Governor Phillip Park, Kitchener Park and Winnererremy Bay and Rowland Reserve.

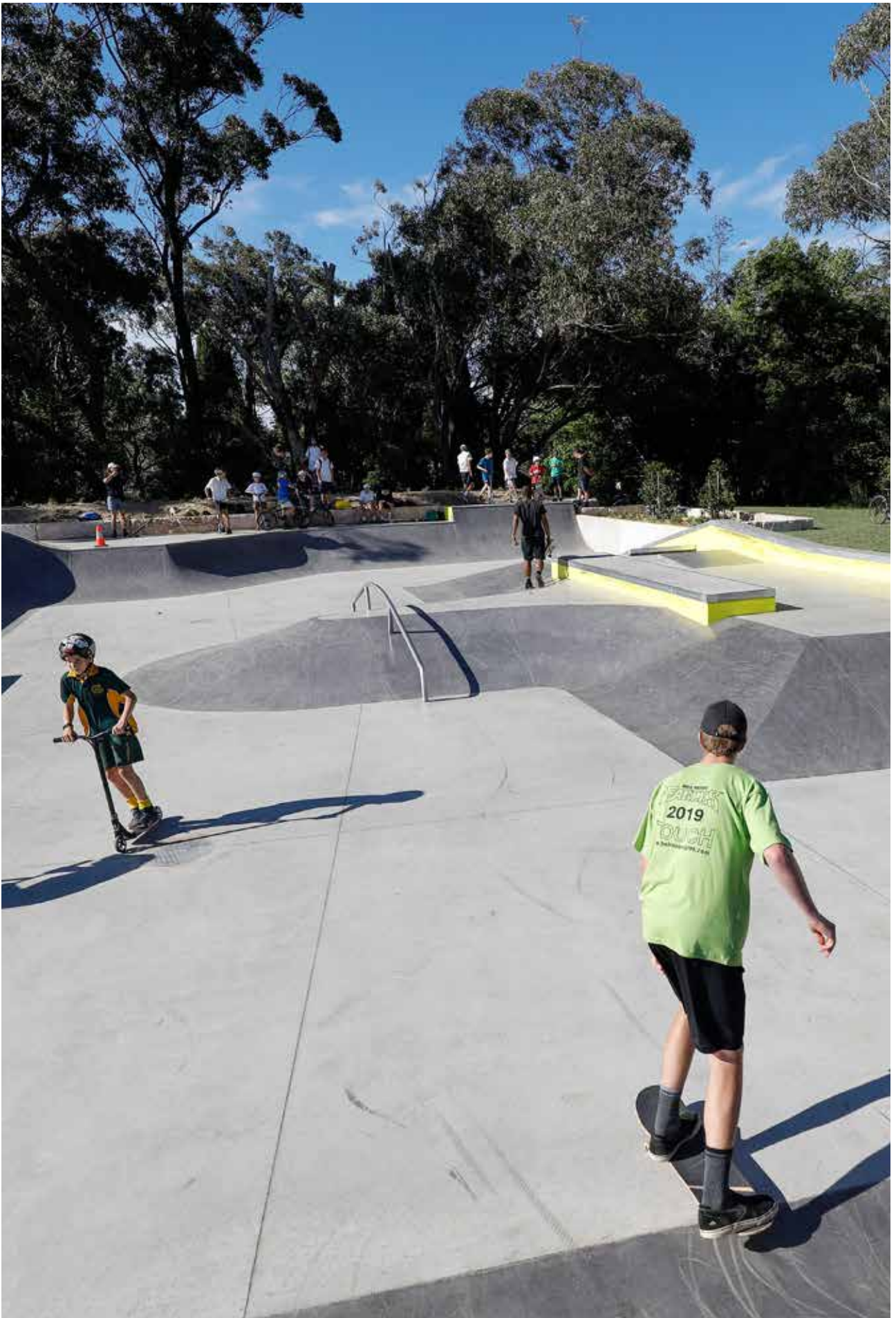
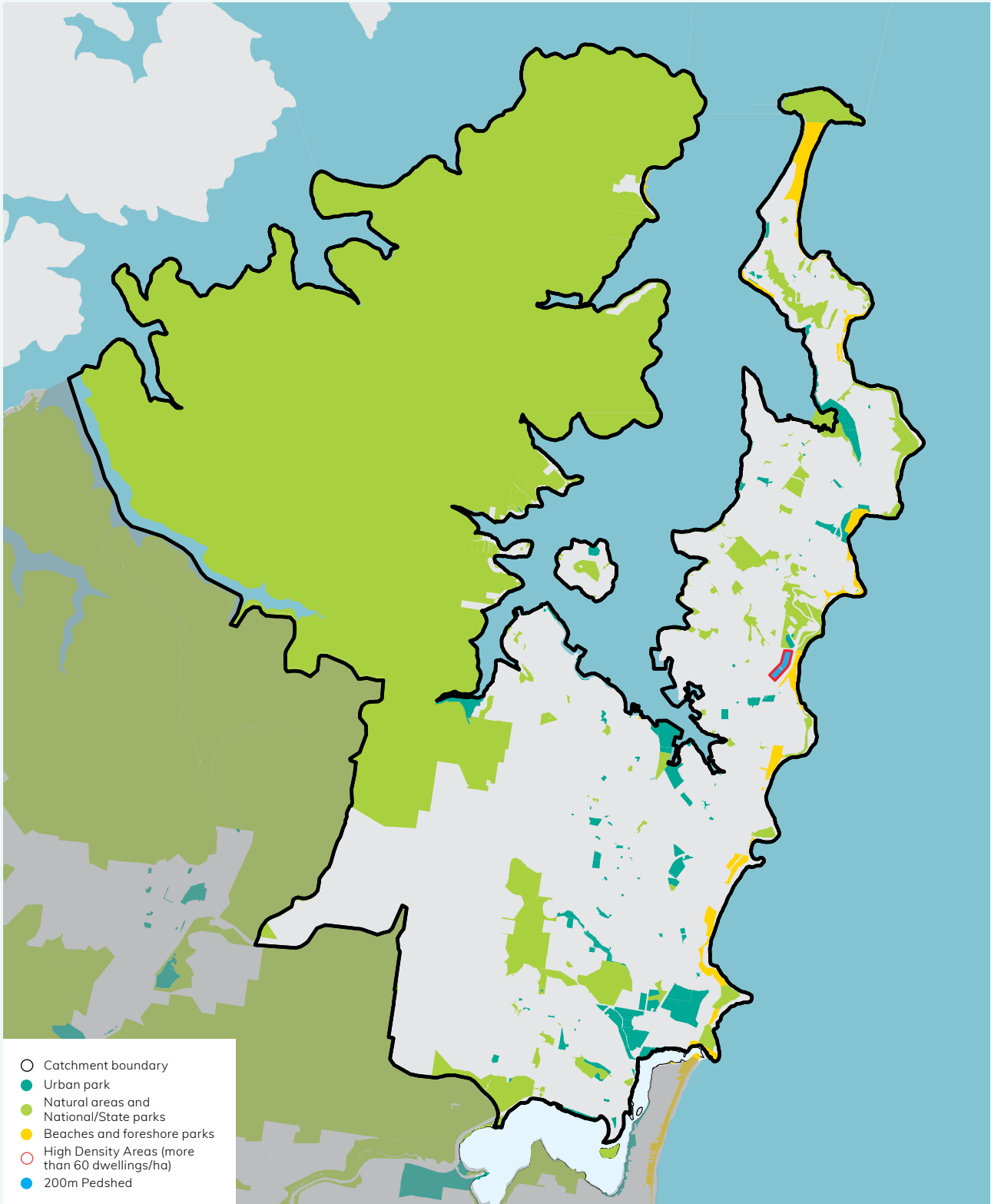
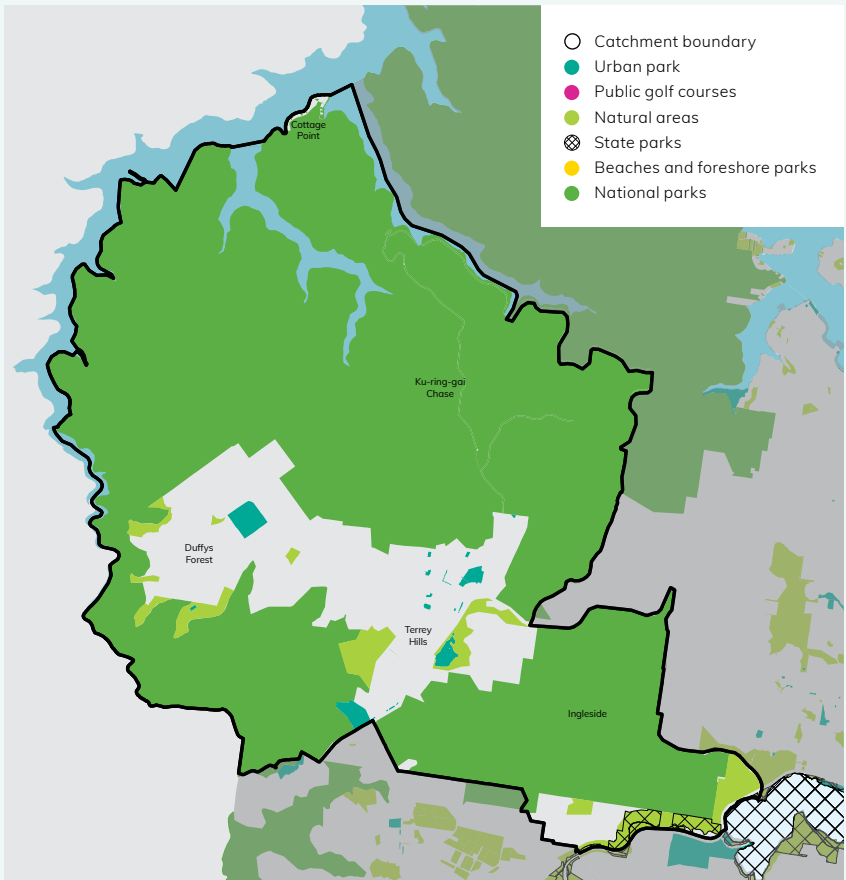


Figure 5

200 metre pedshed mapping for Mona Vale catchment. Areas within the red line are considered high density (60 dwellings or more per hectare). Blue areas within the red boundaries have access to open space within 200m. Areas not shaded blue within the red boundaries do not have access to open space within 200m.





Total open space - 5,879 ha



19 ha

urban parks including sportsgrounds



217 ha

natural areas including 39 ha of state parks



0

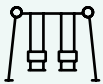
beaches and foreshore parks



5,643 ha

national parks

Recreational facilities



6

playspaces



5

public tennis courts



3

horse arenas



3

bike parks



1

basketball facility



1

skate facility

Open space diversity



1

regional space



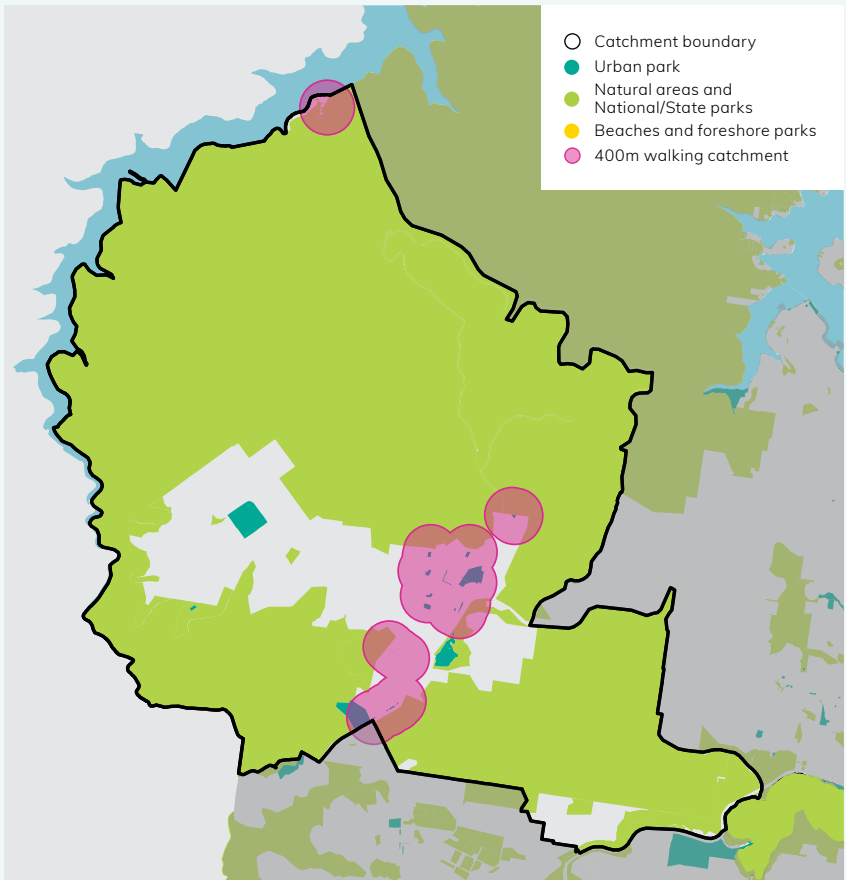
1

district space



~20

local spaces



Proximity to open space

Approximately half of the catchment population is within walking distance (400 m) to an urban park.

There are gaps around Duffys Forest and west Terrey Hills. However, it is worth noting that some residents in this community, such as at Duffys Forest, live on semi-rural lots surrounded by significant national park area.

There no areas within this catchment with a density of more than 60 dwellings per hectare, and hence 200 m walkability mapping has not been undertaken for Terrey Hills.

Current provision analysis

Total provision 2021	Future total provision 2036 *Includes estimated population increase as per section 4.1
1,519.5 hectares per 1,000 people	1,381.0 hectares per 1,000 people

Diversity of recreational opportunity

The majority of open space in Terrey Hills is provided by Ku-ring-gai Chase National Park. This national park surrounds the residential population and accounts for over 90 percent of all open space in the catchment. The catchment also contains popular off-road cycling trails through the natural reserves and national parks, some being authorised and others unauthorised. The remaining open space consists of natural areas and urban parks. Most urban parks are generally well located around the Terrey Hills town centre. JJ Melbourne Hills Memorial Park is the most significant recreational facility in the area, providing a BMX track, pump track and dirt jumps as well as horse arena, cross country horse trail and field archery. Frank Beckman Reserve provides a high quality inclusive district playspace, with the remaining urban parks being generally smaller areas with a playground and a low level of embellishment.

Summary of Provision Findings

Open space provision

A consolidated comparative summary of the provision of open space across the LGA and each of the planning catchments, as provided earlier in this section (section 3.1), can be found in Table 1, with Figure 6 illustrating the breakdown of different types of open space. The Mona Vale and Terrey Hills catchments have the largest amounts of open space per capita (hectares per 1,000 people), however, this is predominantly national park. The data highlights the differences in the types of open space that people have access to close to home and how recreation opportunity would vary. For example, access to beach and foreshore activities in the Manly, Brookvale-Dee Why and Mona Vale catchments and access to nature-based recreation opportunities in the Terrey Hills and Frenchs Forest catchments.

The data indicates that although the quantities and types of open space vary across the catchments and population growth is anticipated in some areas, the Northern Beaches has good quantities of open space and will continue to do so into the future. When compared with open space provision in other Sydney council areas, the Northern Beaches is well supplied (see section 4.3 for details on benchmarking).

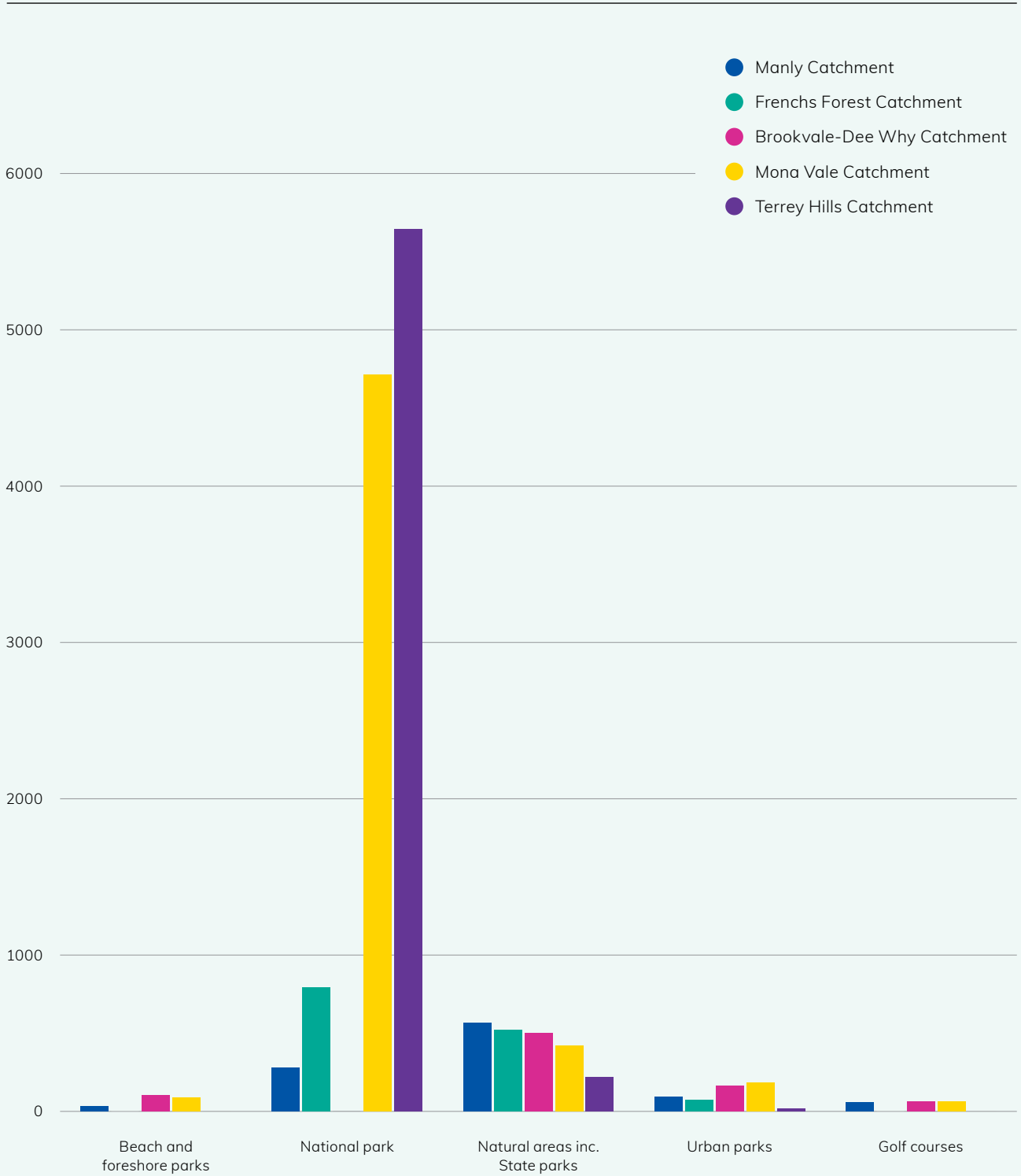
Opportunities for increasing quantity of open space are rare, and although Council will continue to partner with State Government agencies for access to new and improved open spaces (e.g. through the NSW Parks for People Program for Nandi Reserve and County Road Reserve or purchasing land), the future focus is largely on realising the full potential and best use of the existing open space network to meet community needs. This can be achieved by improving existing open spaces, connectivity and recreation facilities and infrastructure and maintaining open spaces and facilities to the expected standard.

Table 1

Hectares per 1,000 people by catchment in 2021 and 2036. 2036 figures are based on current quantities of open space and anticipated population changes (increases and decreases as outlined in this section 3.1 and section 4.1).

Catchment	Total open space provision 2021	Total open space provision 2036
Manly	15.8 ha per 1,000 people	15.2 ha per 1,000 people
Frenchs Forest	34.8 ha per 1,000 people	25.2 ha per 1,000 people
Brookvale - Dee Why	8.0 ha per 1,000 people	7.3 ha per 1,000 people
Mona Vale	85.2 ha per 1,000 people	78.8 ha per 1,000 people
Terrey Hills	1,519.5 ha per 1,000 people	1,381.0 ha per 1,000 people
LGA wide	53.6 ha per 1,000 people	47.7 ha per 1,000 people

Figure 6
Hectares of open space type by catchment.



Diversity and distribution of recreation facilities

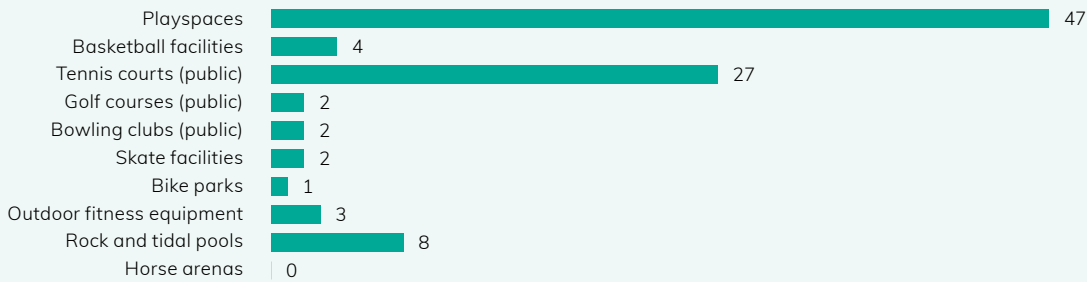
Recreation facilities are dispersed throughout the LGA as shown in the charts in Figure 7. Most catchments contain a mix of recreational facilities. As expected, certain facilities are not found in every catchment where there are physical land constraints, for example, rock and tidal pools are only found in the coastal catchments.

The Mona Vale, Manly and Brookvale-Dee Why catchments have a higher number of public recreation facilities on Council owned and managed land respectively (100, 96 and 90 recreation facilities) but they also have higher populations compared to the other two catchments. The Terrey Hills catchment has the least amount of recreational facilities (19) but due to a low population it has the highest number of recreation facilities per capita. The Frenchs Forest catchment has 75 recreation facilities. The following pages review the distribution of recreation facilities across the LGA.

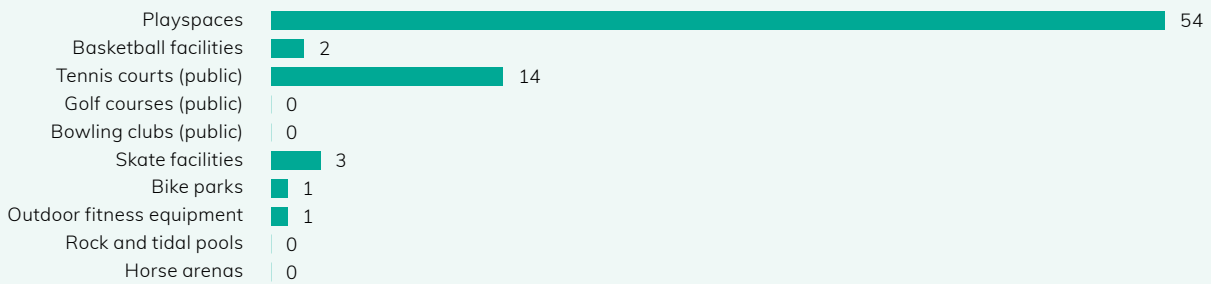
Figure 7

Charts representing recreation facility provision by catchment on Council owned and managed land. Population data provided for comparative purposes.

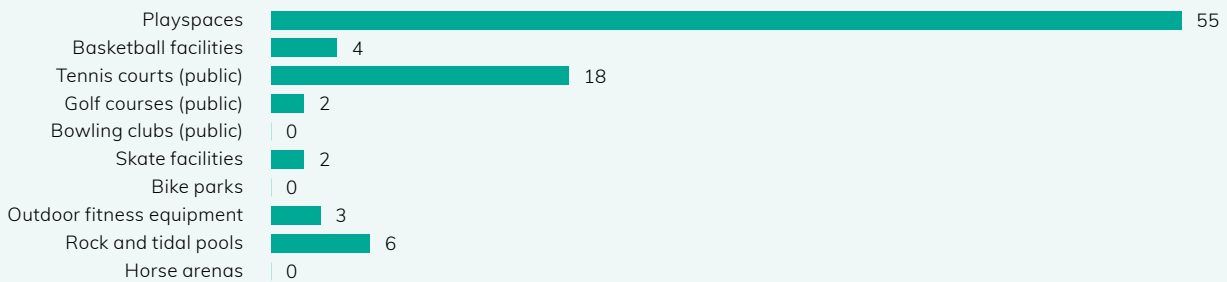
Manly Catchment - 62,967 (population)



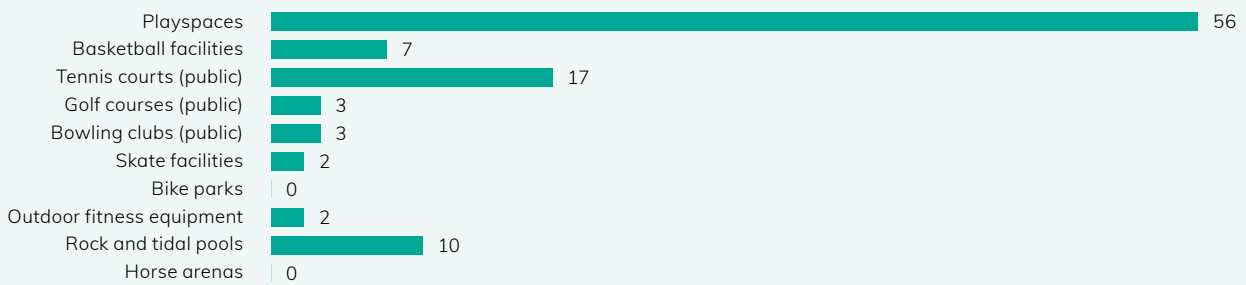
Frenchs Forest Catchment - 39,809 (population)



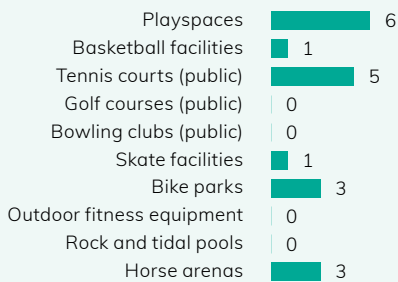
Brookvale-Dee Why Catchment - 101,191 (population)



Mona Vale Catchment - 63,806 (population)



Terrey Hills Catchment - 3,869 (population)





Skate/scooter parks

Every catchment has at least one skate/scooter park facility. Council has now delivered on all of the new skate/scooter facilities that had been promised to the community through previous plans and strategies. Those most recently completed are at North Curl Curl Community Centre, Lionel Watts Reserve (Belrose) and Terrey Hills Oval. There may be an opportunity to improve or expand some existing skate facilities such as at Aquatic Reserve.

Bike parks

A key gap in the findings of recreation facility provision and distribution is the lack of bike parks, particularly in the Brookvale-Dee Why and Mona Vale catchments. This is explored separately in greater detail later in this needs analysis along with other kinds of off road cycling trails and facilities.

Playspaces

Playspaces are explored in greater detail later in this Strategy but have been included here to illustrate the high provision when compared to other kinds of recreation facilities. Playspaces can cater to differing ages and interests, however, older children and youth often prefer alternatives to a structured playground, such as adventure play, basketball facilities, bike/skate/scooter parks or fitness equipment. This comparative recreation facility data assists in highlighting the potential to provide varied play experiences in some locations in the future that cater for older children and youth as an alternative to structured playgrounds.

Basketball facilities and multi-use courts

The provision of outdoor basketball facilities is variable across the catchments and may range from quarter courts to full courts and shared multi-use basketball/netball courts (18 basketball facilities, 43 full sized hard court netball courts, with some being shared/multi-use). The Mona Vale catchment has the highest number of facilities, however, four of these are shared/multi-use netball courts at Warriewood and are not always available for basketball use. While competition basketball occurs indoors, casual practice often occurs outdoors. Basketball facilities are well used across the LGA and Council has received many requests for additional facilities throughout the consultation for this Strategy. Provision of basketball facilities should be considered for park upgrades and integrated as appropriate. There is potential for shared use of some netball courts for basketball use outside of netball's competitive seasons. Shared use during the netball season, that being reversible backboards, is being trialled at Warriewood.

Dog off-leash areas

People like to enjoy quality time outside with their dogs, both on and off the leash. The Northern Beaches has 29 dog off-leash areas, some of which have water access including Rowland Reserve in Bayview. The telephone survey indicated that 47 percent of respondents walk their dog and/or visit a dog park. As an important community, recreation and exercise activity, the provision of spaces for off-leash dogs will be explored further and with targeted community consultation through the development of a draft Dogs in Public Places Policy (Dog Policy). The Dog Policy will consider locations, quality, size and experience in addition to quantity. Requests for more off-leash areas and improvements to existing off-leash areas received during consultation for this Strategy will be considered during development of the Dog Policy.

Outdoor fitness equipment

There are nine outdoor fitness equipment stations across the LGA - three in each of the Manly and Brookvale-Dee Why catchments, two in Mona Vale catchment and one in Frenchs Forest catchment. Terrey Hills is the only catchment without outdoor fitness equipment. There have been many requests for outdoor fitness equipment through consultation activities for this Strategy. Additional facilities should be considered at appropriate locations, particularly co-located with other recreation facilities such as playspaces, basketball facilities and sportsgrounds and amenities.

Horse facilities

All three public horse arenas are in the Terrey Hills catchment (at Kinka, Anembo and JJ Melbourne Hills Memorial Reserve). The Bridle Trail provides a horse trail link through Terrey Hills between Duffys Forest and JJ Melbourne Hills Memorial Reserve, with horse access permissible on some fire trails in Garigal and Ku-Ring-Gai Chase National Parks (in the Frenchs Forest and Terrey Hills catchments), including a link through to St Ives Showground in neighbouring Kuringai Council area. The Frenchs Forest Showground is available as an occasional horse event space. The equestrian cross country trail at JJ Melbourne Hills Memorial Reserve was audited in 2021-22 - and recommendations from this audit have been considered. Horse riding occurs in the Mona Vale catchment, predominately in the Ingleside area where larger properties are located, however, there are no specific trails for horse riding.

Tennis courts

There are 81 tennis courts on Council owned and managed land on the Northern Beaches. The management frameworks for tennis centres varies given that each of the three former Councils had different arrangements. Subsequently the management of tennis centres range from commercial business operations to non-profit club management and a mixture of the two. The utilisation of tennis courts (e.g. court usage/vacancies/availability for non-member use) also varies and largely reflects the differing management regimes. To ensure equity for lease and licence holders, certainty for commercial operators and fair public access, options for preferred management frameworks moving forward needs to be developed, as does facility management options including consistency in maintenance responsibilities.



Bowling clubs

There are three public bowling clubs on Council owned and managed land in the Mona Vale catchment and two in the Manly catchment. Other bowling clubs are privately owned and operated (i.e. not on Council land). The shared use of bowling club facilities is encouraged where appropriate to improve viability and maximise use, for example, sharing building and outdoor space with other sport and recreation clubs.

Golf courses

The Northern Beaches has seven public golf courses plus an eighth (Bayview) that has partial public access. Golf courses have leases granting clubs exclusive use, however, publicly accessible golf courses are open to the public on either a full time or part time basis for non-members. There may be innovative golf related or compatible activities that could increase use of Avalon Golf Course.

Rock and tidal pools

The Northern Beaches is fortunate to have 24 iconic rock and tidal pools along our beach and harbour foreshores that provide highly valued recreational swimming and water play opportunities. With high public use, commercial and booked use is limited. There is ongoing historical use of some rock pools by amateur swim clubs which were fundamental in the development of the pools in the early 1900's. Most rockpools are cleaned weekly in the warmer seasons and fortnightly through the cooler times. Consultation resulted in some requests for additional cleaning of rockpools and the provision of shade. Where appropriate future opportunities for improving accessibility and providing shade would be prioritised at north facing pools which receive the most direct sunlight.

Unstructured use of recreation spaces and facilities

When reviewing the distribution of recreation facilities and planning for new facilities, access to other types of recreation opportunity such as beaches and national parks also needs to be considered. Similarly, sporting areas provide opportunities for unstructured use when not being used for organised sport, for example, netball and basketball courts may be used as learn to ride areas or for roller skating and skateboarding, and sportsfields may be used for fitness training and general play.

Access to unstructured recreation became even more important during the COVID-19 restrictions when many regular facilities and activities temporarily ceased or access limited. During lockdowns sportsfields and courts, where permitted, remained open for casual use, including lighting in the evenings. Additional casual use of lit up areas has highlighted an opportunity for improved access to these spaces at all times when not being used for organised sport.



Diversity and distribution of spaces

Overall, there is a reasonably equitable distribution of different sized urban parks across the LGA. Most catchments have a good proportion of open space over 0.5 ha. In the Mona Vale, Brookvale-Dee Why and Manly catchments, more than half of all urban parks are greater than 0.5 ha in size, which allows for a good diversity of use. Brookvale-Dee Why and Manly catchments also accommodate most of the regional parks in the LGA. This aligns with their larger population sizes and roles as commercial and visitor destinations. Mona Vale has a high number of district spaces. Frenchs Forest has largely local spaces and some district.

Walkability

Most residential areas in the LGA are within 400 m of an urban park, however, walkability is more than just proximity to open space. Barriers to walkability include missing pedestrian links, major traffic routes, steep landscapes, poor amenity and safety considerations. Suburbs with walkability gaps are south of Clareville, Manly Vale, North Manly and west Forestville.

The Northern Beaches Walking Plan (2019) recognises that, despite the relatively high proportion of open space across the LGA, there is a shortfall of quality linkages to connect these spaces. There is a need to improve pedestrian connections from residential and commercial centres to recreational trails to improve access and use. Implementing the Walking Plan will be critical to ensuring the community have good access to the large open space network in the Northern Beaches. Similarly, shared paths can improve access by bicycles.

Walking trails

With walking being the recreation activity with the highest participation, aside from being able to walk to places, residents and visitors also enjoy walking as an experience in itself, whether that be bushwalking, coastal walks or enjoying local parks and neighbourhoods. We are fortunate to have many opportunities for people to walk. Some of the key walking trails include:

- Palm Beach to Manly Coast Walk
- Manly Scenic Walkway (also known as Spit to Manly)
- Northern section of the Bondi to Manly Walk
- Manly Dam loop and other trails
- Narrabeen Lagoon multi-use trail loop
- Southern section of the Harbour to Hawkesbury Walk - linking with the Great North Walk to Newcastle
- Garigal National Park (various trails)
- West Head trails in Ku-Ring-Gai Chase National Park
- Sydney Harbour National Park trails
- Warriewood wetlands



The abundance of parks and reserves on the Northern Beaches provide opportunities for local experiences close to home as well as green linkages between spaces that enable longer walk experiences, depending on the interest and ability of the walker. In this respect even the smaller laneways and drainage reserves can provide important green links. Wayfinding through signage and mapping is also fundamental to ensuring an enjoyable experience. Where trails cross multiple land tenures wayfinding plans should be coordinated.

There are many well used walking trails for which public access is unclear, contested (e.g. ownership/ responsibility uncertain) or not formerly permitted, including many trails that have been created to link private properties to natural bushland and foreshore areas. This can be problematic if the encroachment results in the apparent alienation of public land or trespassing on private property. Informal trail development can result in fragmentation of natural areas and impacts on sensitive ecological areas.

Areas that provide walking access (or potential for) and high connectivity value for the community but that require additional research or feasibility in order to improve or formalise include:

- some areas along the Pittwater foreshore
- some areas of creek foreshore at North Manly
- access from Elanora Heights to Deep Creek
- linkages with National Parks, e.g. Deep Creek
- fire trails and other trails at Red Hill

Improved or formalised access to trails at Deep Creek and Red Hill would also benefit off road cycling and this is explored separately in section 3.3.

The popularity of walking, combined with impacts from wet weather events affects the condition of trail surfaces, in particulate erosion. Ongoing maintenance should consider longevity combined with environmental sensitive solutions.

3.2 Playspace Analysis

Introduction

Playspaces are a critical element of the Northern Beaches open space network, providing essential spaces for children, families and carers to socialise, have fun and be active.

There are currently 217 publicly accessible playspaces across the Northern Beaches, which are progressively renewed and upgraded. Like open spaces, the Northern Beaches playspace network is diverse and consists of a range of spaces of differing sizes, play experiences and supporting amenities. This network needs to be appropriately planned, managed and maintained to support the needs of the Northern Beaches community.

This section reviews the current quantity, distribution and condition of playspaces across the Northern Beaches and according to the five planning catchments. It outlines the typical facilities for each of the playspace hierarchy classifications of regional, district, neighbourhood and local. Best practice criteria such as access, diversity, inclusivity, quality and walkability are outlined.

The limitations of open space benchmarks are discussed in section 4.3, however, benchmarks have been considered here as a useful reference point for comparing similar areas and when comparing provision in relation to population growth, rather than as a sole driver for the quantity of playspaces.

A comparison of metropolitan Sydney Council's (see section 4.3) found a large variance of between 1,000 and 2,300 people per playground based on 2016 population data, with Northern Beaches having one playground per 1,247 people. A review of playspace provision across Australian metropolitan LGAs found that one playground per 1,000 - 1,300 people or one playground 300 children (aged 0 - 14 years) were common benchmarks for play provision*. The current quantity of playspaces in the Northern Beaches is therefore considered to be very good. For the benefit of a comparative reference point the analysis in this section draws on a ratio of playgrounds per 1,300 people.

Some proposed new playspaces have been included in this section to accommodate gaps or likely future gaps in equitable provision. The analysis in this section informs the Strategic Directions and Action Plan.

*Source: State of the Sector Report on Playgrounds 2014, City of Burnside Playground Strategy, Waverley Council Play Space Strategy



Playspace classification

Consistent with Council's Northern Beaches Asset Management Plan Strategy 2022-2032 and Asset Management Plan 2022-2032, the playspace network includes a hierarchy of the following classifications:

Local playspaces

Located in residential areas and serves the immediate street catchment, being within an approximately five-minute walk (400m distance) to residents. Provide limited play diversity and basic play equipment.

Typical Facilities: Single swing set or free-standing slide. Grassed area with some natural shade and/or a seat.

Neighbourhood playspaces

Located in residential areas and serves the partial suburb catchment, being within an approximately ten- minute walk (800m distance) to residents. Provides a few playspace elements which cater to different age groups and can incorporate different play activities.

Typical Facilities: Two or more pieces of play equipment, typically including a playspace unit with supporting recreation elements. Provides basic supporting amenities e.g. seats, picnic tables, natural shade

District playspace

Destination playspace which serves multiple suburbs, being within an approximately 2km - 5km radius of residents. Generally co-located with other open spaces such as sportsfields, foreshores, natural areas or other community infrastructure.

District playspaces provide a range of play equipment which cater for different ages and play activities and generally support a longer play time. They are likely to be an attractor for the local area, with users more willing to travel and use these playspaces as meeting points for social activities (e.g. mothers groups).

Typical Facilities: Multiple play elements which are typically fenced and protected with shade sails/cloths. Provides supporting amenities such as water fountains, seats or picnic facilities, and may also provide toilets and barbeque facilities. Typically serviced by some off street car parking and connections to the active travel network.

Regional playspace

Destination playspace which attracts users from outside of the LGA. Regional playspaces provide a multi-age area which can support a diversity of play activities (e.g. nature play, adventure play) and multiple users. Likely to be used as an attraction, with users typically travelling here for a 'day out' or to spend more than 1 hr playing.

Typical facilities: Multiple play elements, including more advanced equipment for older children. Provides supporting amenities including toilets, seats, picnic/barbeque facilities and dedicated on-site parking. Typically serviced by good connectivity to public and active transport networks and co-located with other supporting community infrastructure.

To better accommodate the needs older children and youth it is proposed that future playspace design, in particularly district and regional spaces, include recreation opportunities such as bike parks, basketball facilities and fitness equipment.

Planning for playspaces

Leading practice

Like open spaces, leading practice planning for playspaces favours an integrated approach, assessing playspace needs using performance criteria and key indicators as benchmarks.

The NSW Department of Planning, Industry and Environment outlines the core principles and processes for designing, planning and managing more inclusive play spaces in the Everyone Can Play Guidelines (2019). The Guidelines also provide a playspace evaluation checklist to assist in reviewing existing playspaces to enable more people to access, play and stay at playspaces.

The Guidelines are underpinned by three core principles. These principles are most relevant for playspace provision in the Northern Beaches LGA and include:

- **Can I get there?**
Consider location, layout, signage, wayfinding and accessibility to ensure everyone can find their way to, in and around the playspace.
- **Can I play?**
The play experience, including the equipment and surfacing, should allow everyone to experience a variety of challenging and engaging play opportunities in a way that suits them.
- **Can I stay?**
Consider safety, facilities, landscaping and the wider environment to ensure everyone can stay at the playspace for as long as they would like.

The NSW Government Architect's (GANSW) Draft Greener Places Design Guide (2020) also outlines considerations for the planning, use and design of outdoor playspaces. The draft guidelines provide indicative performance criteria for the establishment of play areas for children of different ages. The performance criteria broadly encompasses the following:

- **Access, connectivity and location:**
playspaces should be connected to active transport links and be within a 5 - 10 minute walk of homes, depending on size and age ability. Play spaces should be ideally located to facilitate a high degree of visibility and passive surveillance.
- **Diversity:**
play spaces should be diverse, providing a different play experience from areas immediately opposite. This may involve consideration of different play types e.g. nature play, adventure play, structured play, water play and opportunities to be creative.
- **Features and facilities:**
consider inclusive design and supporting amenities which enable people and/or carers to stay and use the space comfortably. Supporting amenities may include picnic facilities, seats, water fountains, shade, toilets and fencing/landscaping barriers.
- **Size, shape and boundaries:**
consider the size and street frontage of play spaces relative to the site's urban location and road siting. Smaller play spaces are generally more supported in areas of higher housing density.



Playspace analysis

Provision criteria

Playspaces should be planned as an integrated network, integrating the principles of accessibility, equitable distribution, quality, diversity and inclusive design. To help achieve this, this study has combined both quantitative and qualitative measures to guide future provision. Key measures used in this study include diversity, walkability and quality.

Diversity

A variety of play areas should be provided throughout the LGA to cater for different demands and ages. The playground classification has been applied to assess the distribution of provision to help ensure there is an equitable mix of playspaces which meet community needs. It is also used to help assess potential duplication of provision. To accommodate older children and youth it is proposed to incorporate recreation opportunities such as bike parks, basketball facilities and fitness equipment into future play space design as appropriate.

Walkability

Like open space, everyone should be within a comfortable walking distance to a playspace. While there is no universal standard, the GANSW Draft Greener Places Design Guide recommends most children (up to 15 years old) should be within walking distance (e.g. 400m) to a playspace. It is also understood that people are more willing to travel further distances to larger, more diverse playspaces. Based on this, a walkability standard has been applied to the playspace classification (other than regional playspaces) as follows:

- Local playgrounds - 400 m (5 minute walk)
- Neighbourhood playgrounds - 800 m (10 minute walk)
- District playgrounds - 2 km - 5 km (short drive or 30+ minute walk).

Quality

It is important that playspaces are maintained to an appropriate standard to encourage participation and for the safety of users. Council's Northern Beaches Asset Management Strategy 2022-2032 and Asset Management Plan 2022-2032 technical condition scale outlines the desired quality and condition of playspaces. This scale ranges from 1 (very good: no visible signs of deterioration) to 5 (very poor: major service problems and needs priority for renewal). At a minimum, Council aims for all playspaces to be at a rating of 3 (average) or higher.

In 2020 - 21, external consultants completed an audit of all playspaces within the LGA. All playspaces were assessed on their technical condition, based on the above scale. The outcomes from this audit has been used in this chapter to understand the current quality of playspaces within the Northern Beaches LGA.

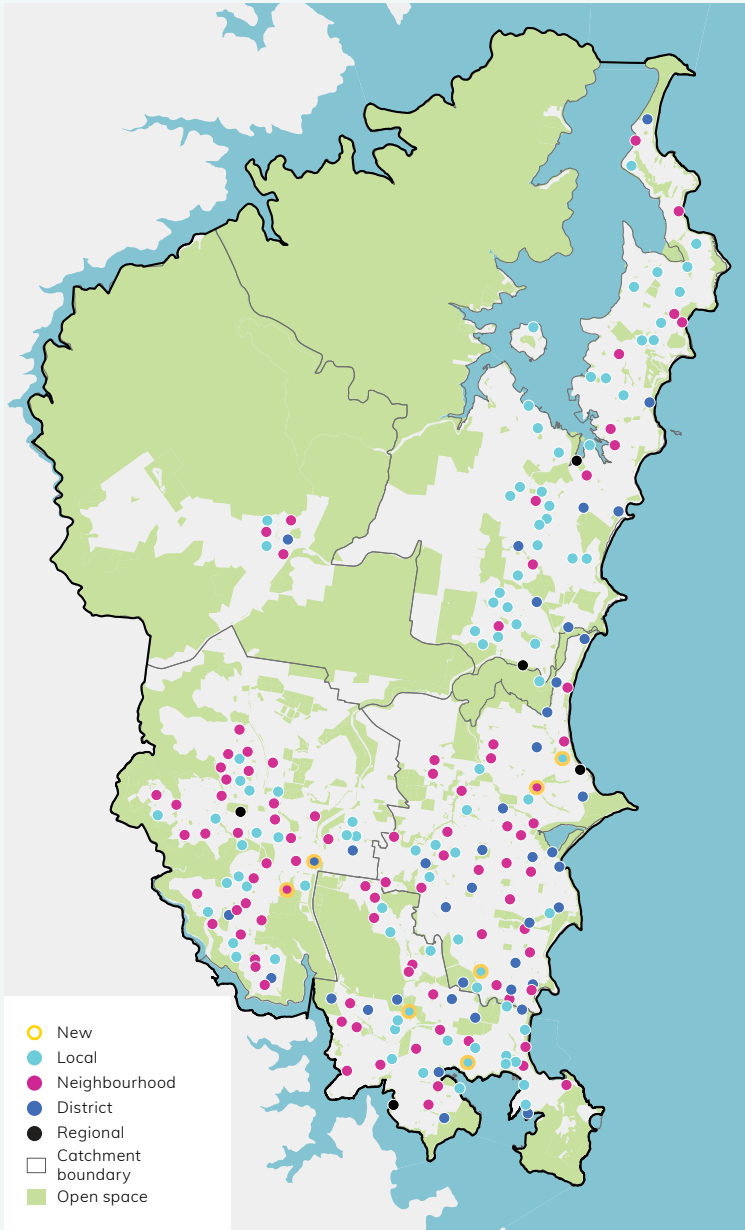


Inclusivity

The Everyone Can Play: A Guide to Create Inclusive Playspaces is NSW Government's best practice toolkit to creating playspaces. As indicated in the title, the toolkit has a strong focus on the provision of inclusive playspaces. It describes an inclusive playspace as being "easy to access, easy to move around, provide a range of play options and challenges, and have appropriate facilities in a comfortable environment" (2019: 10). The document is structured around six design principles for playspaces: find, fit, choose, join in, thrive and belong.

Everyone Can Play also includes a detailed evaluation checklist to assess existing playspaces against a range of criteria. The scope of this project did not include assessment of Council's many playspaces against these criteria. However, the checklist provides a useful tool for detailed planning of individual spaces.

The toolkit also contains a design principles checklist, which can be used to support Council's landscape architects and other playspace designers in the LGA to create inclusive spaces.



Hierarchy	2021	2036
Local	86	90
Neighbourhood	88	90
District	39	40
Regional	5	5
Total	217	224

New playspaces to 2036

- 7 new playspaces

Further details can be found in the catchment breakdowns on the following pages.

A full list of playgrounds and planned changes can be found at Appendix B.

2021 provision

1.0 playspaces; 1,300 people
 1 playspace per 238 children under 15

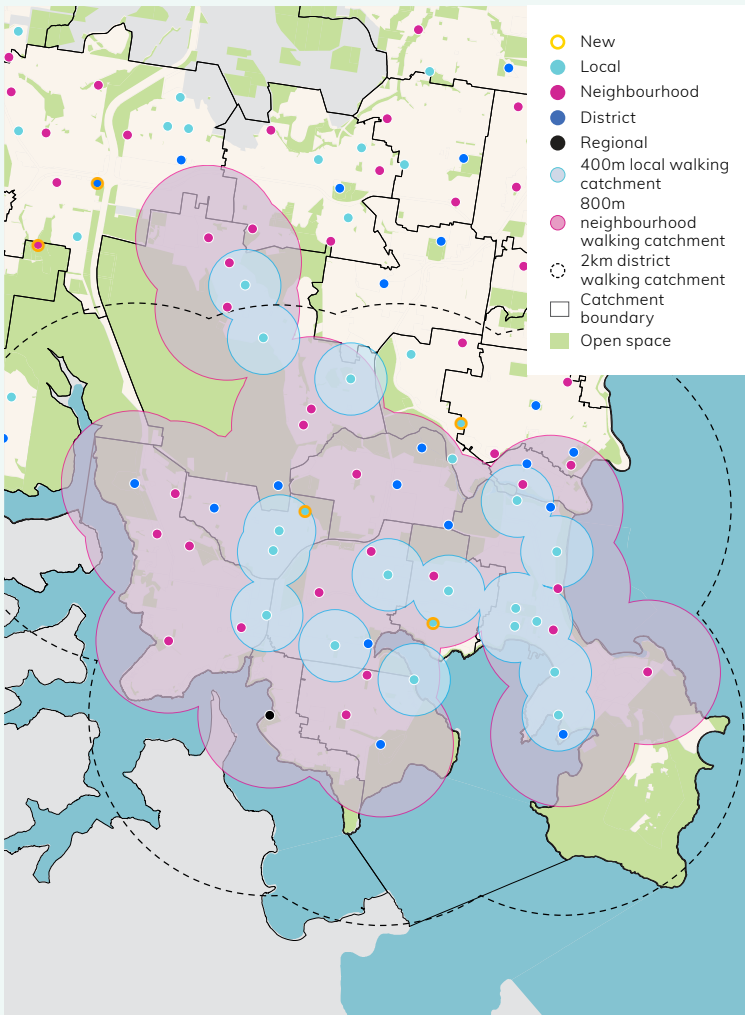
2036 provision (including 10 proposed new)

1.0 playspaces; 1,300 people
 1 playspace per 243 children under 15

Provision standard

The LGA meets the current provision standard ratio with 1 playspace for every 1,300 people. The LGA also exceeds the benchmark of one playspace for every 300 children aged 0 - 15 years, with one playspace for every 238 children across the LGA.*

Looking forward, with 10 new playspaces, the LGA will continue to meet the benchmark ratio of 1.0 playspace provided for every 1,300 people in 2036 (for details on benchmarking see section 4.3). It will also continue to meet the benchmark of one playspace for every 300 children aged 0-15 years by 2036, with one playspace for every 243 children across the LGA.*

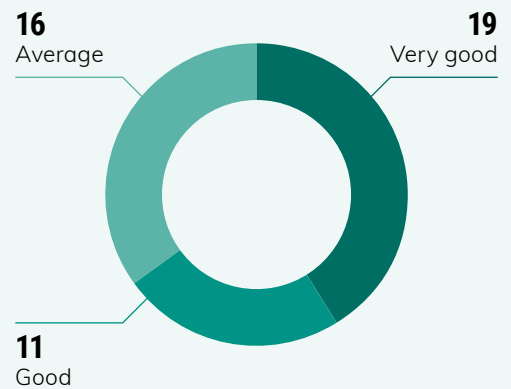


Hierarchy	2021	2036
Local	17	19
Neighbourhood	19	19
District	10	10
Regional	0	0
Total	46	48

New playspaces to 2036

- Ashley Reserve
- Condover Reserve

2021 technical condition



2021 provision

1.0 playspaces; 1,300 people
 1 playspace per 264 children under 15

2036 provision (including 2 proposed new)

1.0 playspaces; 1,300 people
 1 playspace per 246 children under 15

Provision and diversity

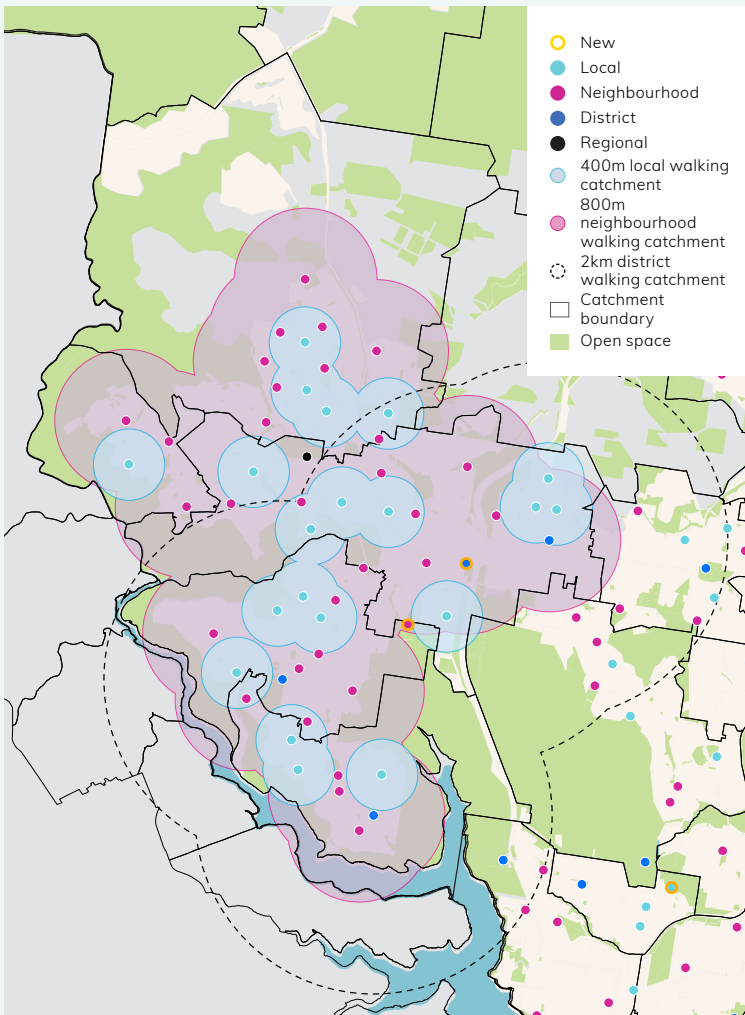
The Manly catchment has a good provision of playspaces and generally meets the provision standard ratio as well as the benchmark for playgrounds per child under 15 years of age. It has a relatively equitable mix of playspaces, with 37% of playspaces as local, 41% as neighbourhood. The Manly catchment one regional playspace at Clontarf and nine (20%) district playspaces, making it the catchment with the second highest number of district playspaces.

Most of the local playspaces are concentrated at the southern end of the catchment, particularly around the built-up suburbs of Fairlight and Manly. This distribution reflects good practice, providing more opportunities for people to access play areas close to home where private backyard or other open space is likely to be limited.

Walkability and quality

Residents of Manly are within walking distance to a local or neighbourhood playspace. Some communities around Manly Vale and Allambie Heights which appear to have a walkability gap are serviced by the playspaces within the neighbouring Brookvale-Dee Why catchment.

Playspaces in Manly are generally of a high quality, with 65 percent of all playspaces in 'very good' or 'good' condition and 30 percent in 'average' condition. There are no playgrounds in 'poor' condition. The planned upgrade of Little Manly Point Reserve will boost the quality of provision and overall play experience for district playspaces as did the recently upgraded regional playspace at Clontarf.

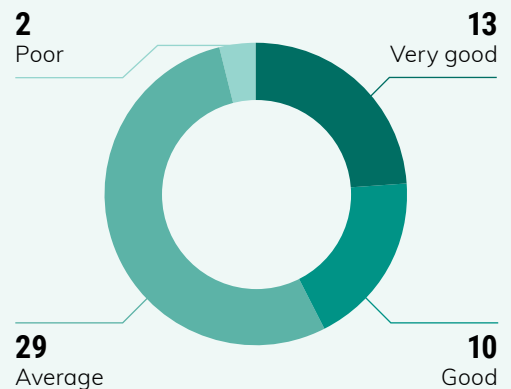


Hierarchy	2021	2036
Local	20	20
Neighbourhood	30	31
District	3	4
Regional	1	1
Total	54	56

New playspaces to 2036

- Brick Pit Reserve
- Forestville Park

2021 technical condition



2021 provision

1.8 playspaces; 1,300 people
 1 playspace per 153 children under 15

2036 provision (including 2 proposed new)

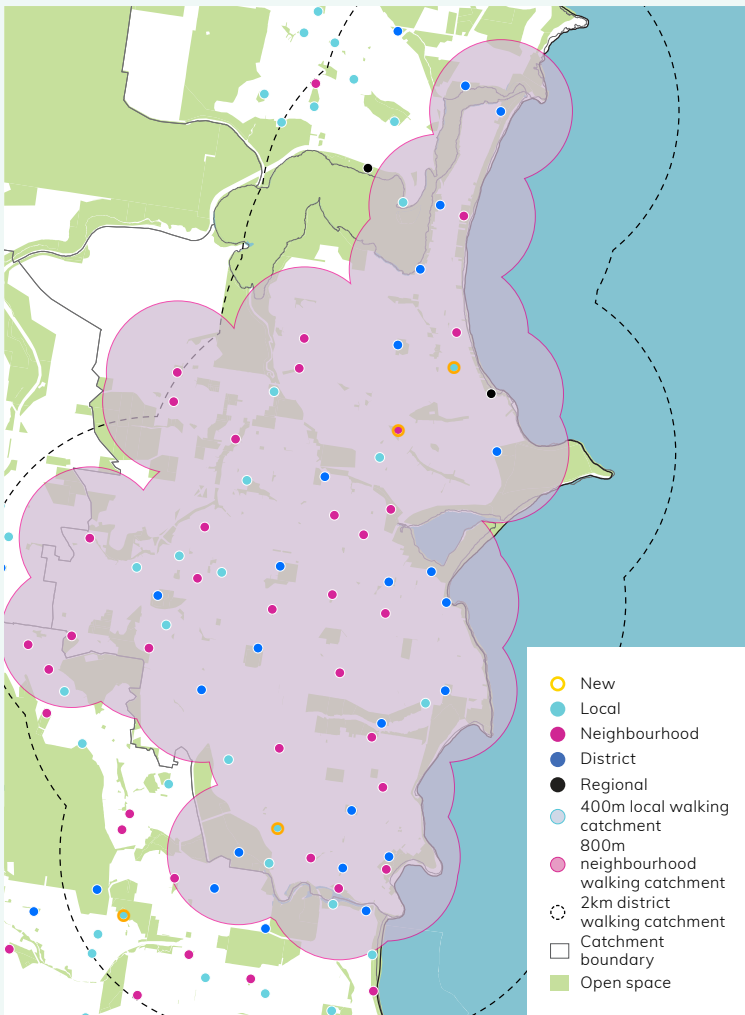
1.3 playspaces; 1,300 people
 1 playspace per 202 children under 15

Provision and diversity

The Frenchs Forest catchment currently has a very high provision of playspaces according to the benchmarks and relative to most of the other catchments, with a ratio of 1.8 playspaces per 1,300 people. Even with population growth by 2036, the catchment will still be well supplied with playspaces, with 1.3 playspaces per 1,300 people. Frenchs Forest has a high proportion of Local and Neighbourhood playspaces (93%), with a recent upgrade to the Regional playspace at Lionel Watts Reserve. Within the growth area around the Northern Beaches Hospital a new District playspace is planned for Brick Pit Reserve and upgrades planned for Rabbett and Akora Reserves.

Walkability and quality

Most residents are within walking distance to a local or neighbourhood playspace, aside from residents to the north and west of Forestville Park which is impacted by barriers to access due to Warringah Road and the Sydney Water pipeline. There are some areas, particularly around Forestville and Frenchs Forest, which currently have multiple playgrounds within a 400 m - 800 m radius. As playspaces reach the end of their useful life consideration should be given to the most appropriate locations to provide new facilities. The Frenchs Forest catchment has the lowest quality of playspaces across the LGA, however, most at least meet the minimum preferred standard of 'average.' The quality of playspaces is expected to improve over the coming years as renewals are undertaken.

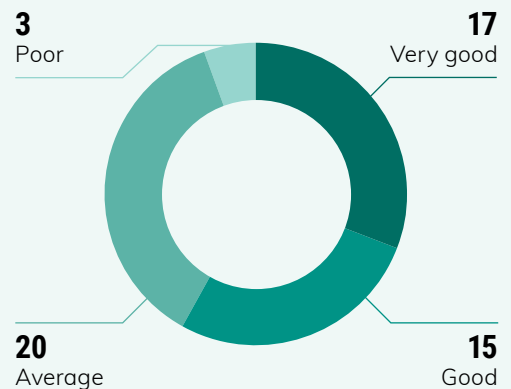


Hierarchy	2021	2036
Local	10	12
Neighbourhood	25	26
District	19	19
Regional	1	1
Total	55	58

New playspaces to 2036

- Parkes Road, Collaroy Plateau
- Fielding Reserve, Collaroy
- McDonald Road Reserve, North Manly

2021 technical condition



2021 provision

0.7 playspaces; 1,300 people
 1 playground per 335 children under 15

2036 provision (including 3 proposed new)

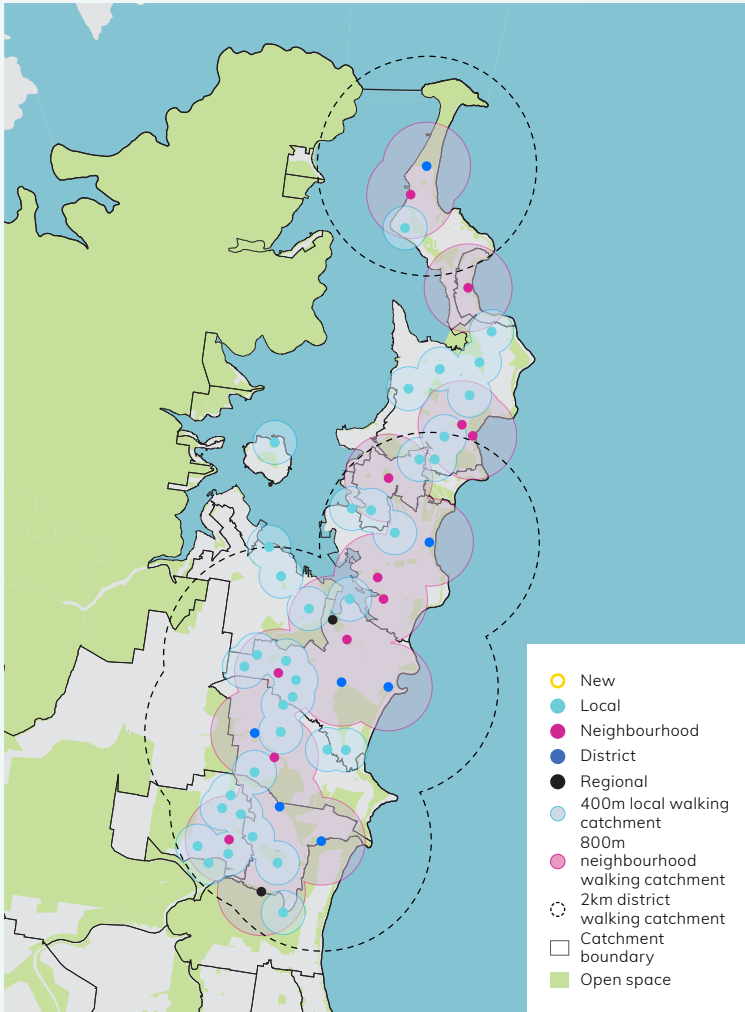
0.7 playspaces; 1,300 people
 1 playspace per 324 children under 15

Provision and diversity

The Brookvale-Dee Why catchment has the lowest playspace provision across the LGA and currently does not meet the provision standard ratio, with 0.7 playspaces per 1,300 people and falls slightly short of the benchmark of 1 playground per 300 children under 15 years of age. However, the catchment contains more higher-order playspaces, with the highest number of district playgrounds (19) across the LGA. This reflects a focus on providing larger high quality spaces catering to diverse recreational interests, for example, Walter Gors Park in Dee Why. The Brookvale-Dee Why catchment also has a good supply of alternate play and recreation experiences including beaches and associated beach activities.

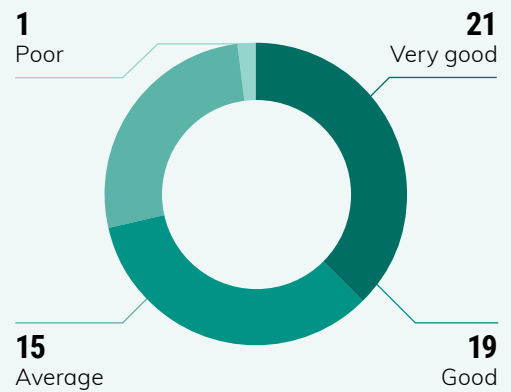
Walkability and quality

Most residents are within walking distance to a local, neighbourhood or district playspace which indicates that good access can still be maintained with less facilities if provided in the right locations. The majority of playspaces in Brookvale-Dee Why are assessed being 'average' or above, with improvements planned including at Ankali Reserve. The topography and roads in North Manly present a barrier to accessing playspaces and consideration should be given to the feasibility of providing a local level play experience at the Western Avenue and McDonald Street road reserve.



Hierarchy	2021	2036
Local	36	36
Neighbourhood	11	11
District	7	7
Regional	2	2
Total	56	56

2021 technical condition



2021 provision

1.1 playspaces; 1,300 people
 1 playspace per 216 children under 15

2036 provision

1.1 playspaces; 1,300 people
 1 playspace per 222 children under 15

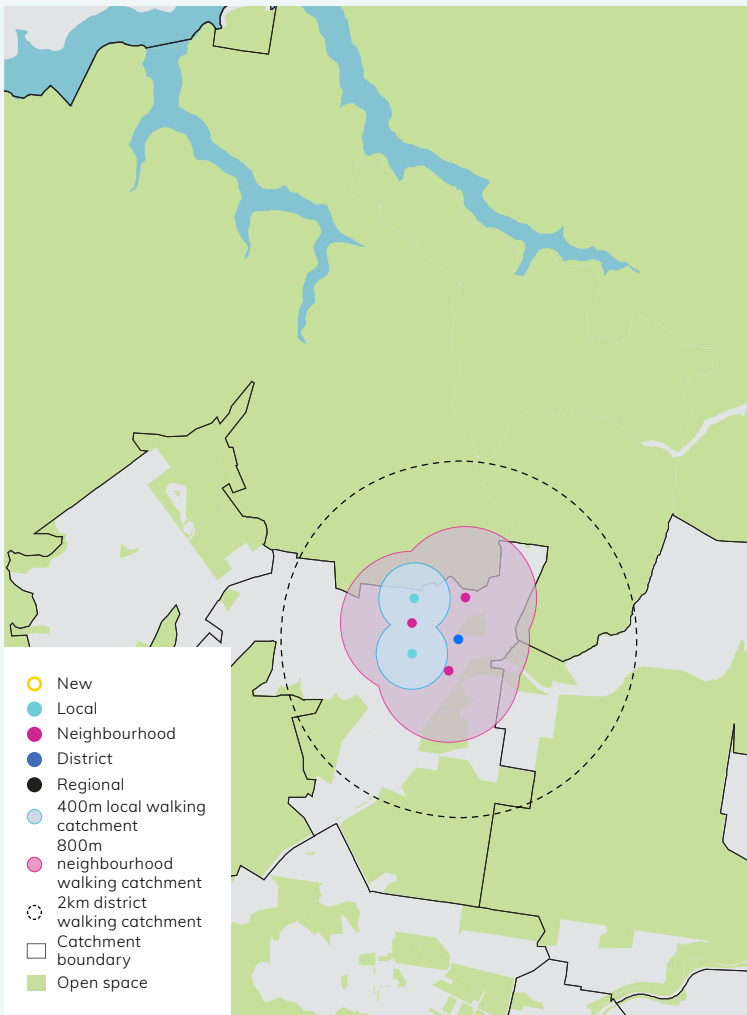
Provision and diversity

Mona Vale has a good provision of playspaces and meets the provision standard ratio and will continue to meet the benchmarks by 2036. The catchment is largely dominated by local playspaces (64 percent) which may indicate some limited opportunities for play diversity. However, feedback from the community indicates that they highly value the smaller play spaces that a less busy, safe for smaller children and provide a quite space for those seeking it. The regional and district playspaces in the Mona Vale catchment are among the best in the LGA.

Walkability and quality

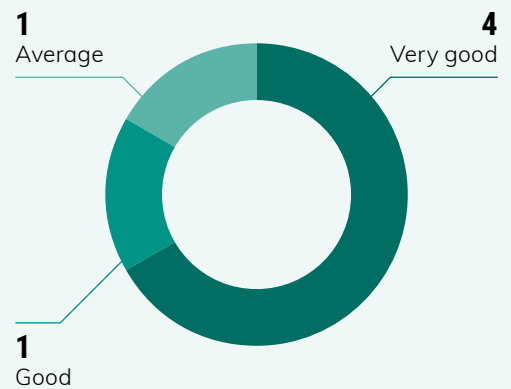
Most residents are within walking distance to a local, neighbourhood or district playspace.

The playspaces in Mona Vale are generally of a high quality, with 71 percent of playspaces in 'good' or 'very good' condition. Iluka Park (local playspace, Palm Beach) is the only playspace in 'poor' condition and improvements will be made in 2022-23.



Hierarchy	2021	2036
Local	2	2
Neighbourhood	3	3
District	1	1
Regional	0	0
Total	6	6

2021 technical condition



2021 provision

2.0 playspaces; 1,300 people
 1 playspace per 128 children under 15

2036 provision

1.8 playspaces; 1,300 people
 1 playspace per 137 children under 15

Provision and diversity

Terrey Hills has the highest provision of playspaces per capita and will continue to exceed benchmarks in 2036. The catchment has a good mix of playspaces reflective of its population size and location.

Walkability and quality

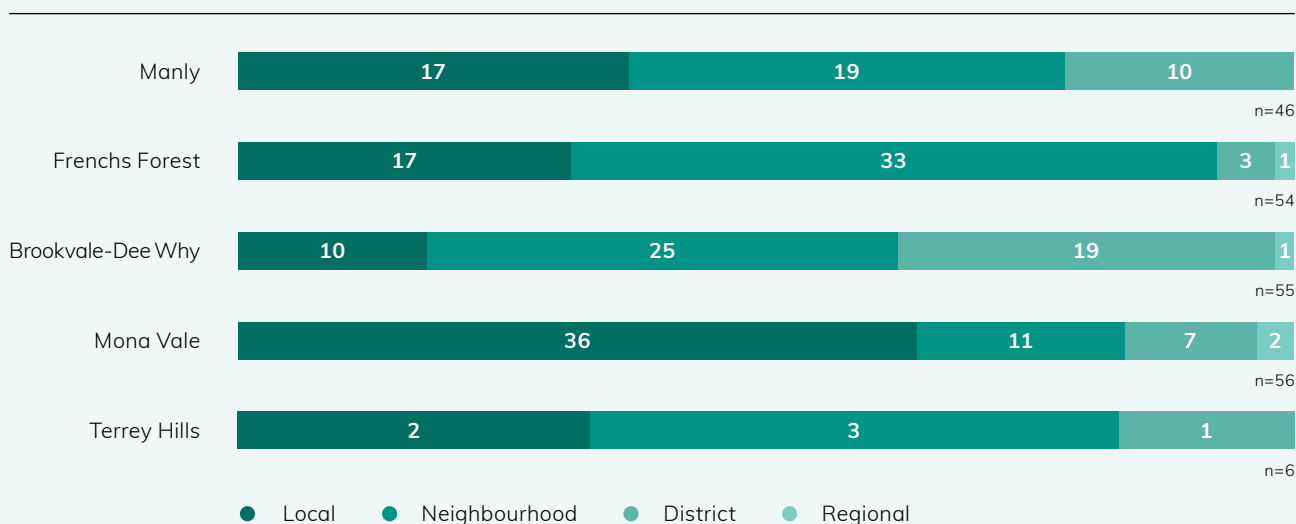
Most residents in the Terrey Hills suburb are within walking distance to a local or neighbourhood playspace. Like the open space provision, there are gaps within Duffys Forest. However, this area has predominantly larger, semi-rural lots surrounded by national park.

The playgrounds in Terrey Hills generally have a high condition rating, with most assessed as 'good' or 'very good'. This includes all of the catchment's neighbourhood and district level playspaces.

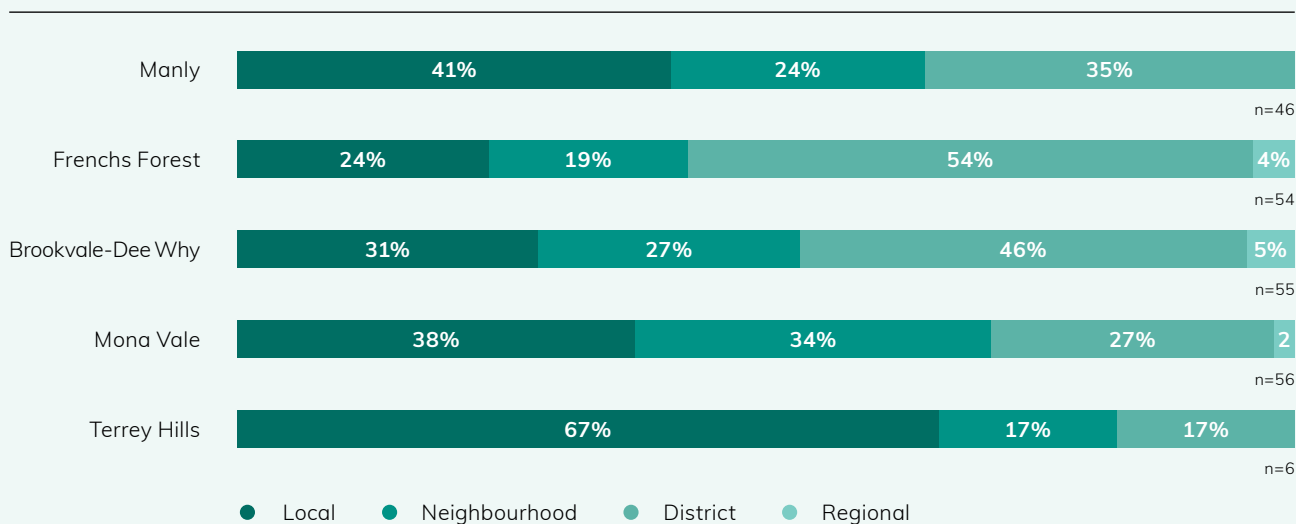
Playspace provision rates

Catchment	2021 provision	2036 provision (including 7 new playgrounds)
Manly	1.0 playspaces: 1,300 people	1.0 playspaces: 1,300 people
Frenchs Forest	1.8 playspaces: 1,300 people	1.3 playspaces: 1,300 people
Brookvale - Dee Why	0.7 playspaces: 1,300 people	0.7 playspaces: 1,300 people
Mona Vale	1.1 playspaces: 1,300 people	1.1 playspaces: 1,300 people
Terrey Hills	2.0 playspaces: 1,300 people	1.8 playspaces: 1,300 people
LGA	1.0 playspaces: 1,300 people	1.0 playspaces: 1,300 people

Playspace classification diversity



Playspace quality (technical condition)



Playspace analysis - emerging findings

Diversity

Most catchments contain a good mix of local, neighbourhood and district playgrounds which generally align with their population size and distribution. However, there is a high provision of local playgrounds in the Mona Vale catchment, which may represent limited opportunities for play diversity and a slight duplication of provision.

While most playgrounds support structured play activities only, the current mix of playground types provides some good diversity in play activity offerings. Some standout playgrounds include:

- **Bert Payne Reserve** (Mona Vale catchment)
an inclusive play area for younger children with accessible access, sensory and manipulative play, and space for carers to assist.
- **Collaroy Beach Playground** (Brookvale- Dee Why catchment)
an inclusive, all abilities play area with more challenging equipment for older children.
- **Walter Gors Park** (Brookvale-Dee Why catchment)
a water play playspace with outdoor cooking facilities and areas for free play.
- **Allambie Heights Oval** (Manly catchment)
an active playspace within a bush setting with a multisport half court for teenagers and natural climbing frame.
- **Lionel Watts Reserve** (Frenchs Forest catchment)
an inclusive playspace with accessible family toilets, nature play and imaginative and passive activities using water play and public art.

Walkability

Most residents are within walking distance (400 - 800 m) to a local or neighbourhood playspace. There are some gaps around Collaroy and Brookvale (within the Brookvale-Dee Why catchment) and although this gap is met by the provision district playspaces, the larger playspaces can be busy during peak times (e.g. after school and weekends) which can act as a deterrent for use and therefore do not replace the need to also provide local and neighbourhood playspaces.

While walkability needs are largely met across the LGA, there are some areas in the Frenchs Forest catchment, particularly around Forestville and Frenchs Forest which currently have multiple playgrounds within a 400 m - 800 m radius which is reflective of the high provision rate.

3.3 Off road cycling analysis

Summary

Off road cycling is a popular recreation activity on the Northern Beaches with an experienced riding community. Residents and visitors participate in a variety of riding styles including but not limited to cross country, gravity, dirt jumping and BMX. However, riders have access to relatively few authorised trails and bike park facilities catering to limited skill levels.

Managing the proliferation of unauthorised bike trails over the years, and even more so since COVID-19, is an ongoing challenge for Council. Closing and rehabilitating unauthorised trails is costly and often unsuccessful, with trails often reinstated or new trails emerging. This causes significant damage to the sensitive natural environment through tree and vegetation removal, erosion and increasing fragmentation of bushland.

A key part of preparing this Strategy has involved a targeted analysis of off road cycling facilities. The aim is twofold, to better meet the needs of riders and to identify ways to reduce unauthorised trail building.

This section summarises the outcomes of community engagement specific to off road cycling, reviews the current provision of facilities across the LGA and in each of the planning catchments, and outlines how Council will respond to gaps in provision and opportunities for improvement. The opportunities are detailed further in the Action Plan.

Community engagement

In addition to the broader project community consultation (outlined in section 3.4 and Appendix C e.g. the telephone survey), targeted stakeholder engagement included an Off Road Cycling Rider Survey and the establishment of an Off Road Cycling Stakeholder Group made up of representative from riding clubs, stakeholder groups and interested individuals. Ongoing meetings were held with interested parties throughout the project.

By engaging through various methods we were able to receive input from riders with varied interests and abilities as well as differences gauged through employing different consultation methods. For example, for the opt-in Off Road Cycling Rider Survey 89% of respondents (n=1,770) were male and 11% female. In comparison, through the random stratified telephone survey (n=403) it was revealed that the gender difference was a lot narrower, with 26% of male residents over 15 years old participating in off road cycling within the last 12 months, compared to 17% of females. In the Off Road Cycling Rider Survey many of the cross tabulation results were similar for males and females, although female respondents were more likely to rate themselves as beginners for all riding styles (e.g. 25% compared to males and 4% for cross country riding).

In the children's consultation activities at Vacation Care (6-12 years) and Pre-School (3-5 years), many children voted 'bike park' to be the recreation activity that appealed most to them, narrowly ahead of skate/scooter park.

Variations in participation in off road cycling were also revealed in each of the planning catchments. Those in the Frenchs Forest/Terrey Hills catchments combined had the highest participation, with 42% of residents over 15 years old participating, compared to the Mona Vale, Manly and Brookvale-Dee Why catchments having 24%, 18%, 13% respectively. These figures likely represent access to opportunity to ride off road, with the Frenchs Forest/Terrey Hills catchments having more facilities available which is consistent with also having more suitable bushland landscapes.

Consultation revealed overall that riders want new and improved off road cycling facilities that cater to a range of riding styles and skill levels. The detailed survey results can be found in Appendix C and are also integrated into the broader Consultation Outcomes summary in section 3.4.

Current provision

An analysis was undertaken of off road cycling facility provision across the Northern Beaches and in each planning catchment as well as regionally accessible facilities in other Northern Sydney Council areas and adjoining National Parks.

Table 1 and Figure 5 illustrate the existing off road cycling facilities in each of the planning catchments as well as committed projects. The analysis highlights a specific lack of authorised off road cycling facilities in the Mona Vale and Brookvale-Dee Why catchments. This is consistent with an increase in unauthorised trails and dirt jumps being constructed in these areas where local riders do not have any authorised facilities available.

The current state of existing facilities is variable. An audit of the Manly Dam mountain bike trail was undertaken, with improvements being planned and implemented in consultation with key rider stakeholders and additional maintenance works are ongoing.

An upgrade to the junior level Grove Bike Park at Seaforth was recently completed and initial planning is underway for an intermediate to advanced bike park at Seaforth Oval. New bike parks will also be constructed in the near future at Wyatt Avenue in Belrose and Lynne Czinner Park in Warriewood. The Wyatt Avenue Bike Park will provide a junior facility that will facilitate progression to the nearby Bare Creek Bike Park.

Given the high participation rates and range of riding styles and skill levels, the current provision of off road cycling facilities on the Northern Beaches falls well short of meeting current and future demand for this growing activity. Pending works will go some way towards addressing this gap. However, more facilities are needed to adequately meet rider needs.

Unauthorised trail review

Prior to commencing the development of this Strategy, Council had agreed to consider formalising a small number of unauthorised trails following ongoing consultation with riders. This included one trail at Ingleside Chase Reserve (known as Mona Vale Downhill) as well as two trails that connect Forestville Park to Garigal National Park (Daisy Duke and Missys). In each case formalising the trails required confirmation of any necessary environmental considerations and how they could be addressed. Improvements and formalisation based on trail audits and environmental reviews are pending.

Since commencing work for this Strategy, Council has undertaken further auditing of unauthorised trails in order to determine which, if any, may be suitable for formalising and which should be removed and revegetated. Areas where trail audits have been performed include Deep Creek, JJ Melbourne Hills Memorial Reserve, Manly Dam and further trails at Forestville Park. The outcomes of these audits have been discussed with key rider representatives and other relevant stakeholders. Some trails are proposed to be closed and revegetated, others are proposed to be retained and improved. These are detailed in the Action Plan. At Deep Creek an environmental review is underway in partnership with the Department of Planning and Environment (DP&E) / National Parks and Wildlife Service (NPWS) due to the unauthorised trail network straddling both Council and NPWS land. The environmental review and further community consultation is required prior to making a recommendation on these trails.

The locations of many unauthorised local dirt jumps have also been reviewed. These dirt jumps develop regularly in bushland and parks and are often closed and signage erected to inform and educate regarding the prohibition of unauthorised trail building and tree and vegetation removal. Reasons for closure include safety, environmental incompatibility or unsuitable location, e.g. too close to residences or poor passive surveillance. However, the Action Plan in this Strategy identifies locations where it is proposed to provide opportunities for bike play across the Northern Beaches. Depending on the location this could range from dirt jumps or asphalt pump track.

Compliance is an ongoing challenge in terms of educating unauthorised trail builders on the legislative frameworks in place to protect parks and bushland from illegal tree and vegetation removal and subsequent environmental degradation caused by erosion and fragmentation. Furthermore, concern has been raised regarding the process of formalising unauthorised trails and the precedent it may set for encouraging further illegal trail development and associated destruction of the environment. As a deterrent to further unauthorised trail building any new trails constructed without prior agreement from Council will be closed and may not be considered for formalising. Council has liaised with riders in good faith in order to review the potential to formalise some unauthorised trails to better meet the needs of riders. Council will continue to work with riders to explore opportunities for new and improved off road cycling facilities with a view to decreasing the prevalence of unauthorised trail building and will continue to work towards establishing partnership arrangements with riders and rider groups for the construction and maintenance of off road cycling trails in suitable locations.

Opportunities for new and improved off road cycling facilities

Following the review of current off road cycling facilities, unauthorised trails and seeking input from riders, Council is proposing a number of new and improved trails and bike parks to address the gaps in provision. The opportunities are summarised in Table 1 and indicative locations are mapped in Figure 5. Further detail is provided in the Action Plan.

Strategically Council intends to:

- provide new and improved off road cycling trails and bike parks where appropriate catering to a range of riding styles and skill levels
- provide bike parks in each of the planning catchments. Advanced facilities are more likely to attract users from outside the immediate local area and should be located in areas that can accommodate visitation including access to car parking and amenities and good passive surveillance, and not unreasonably impact on residents and other users
- formalise some unauthorised off road cycling trails that were reviewed as part of the development of this Strategy and following consideration of feedback from relevant stakeholders and appropriate environmental reviews and planning approvals. Any future unauthorised trails developed that involve vegetation removal and that do not have the prior approval of Council will be removed.
- close unauthorised trails and bike parks that have been assessed as not suitable to formalise. Reasons may include environmental concerns, conflict with other uses and users, inappropriate location, e.g. proximity to residences, supporting facilities and amenities
- strengthen compliance initiatives to minimise unauthorised trail building, through signage, ranger visibility, education and ongoing engagement with riders
- partner with other land owners for cross tenure opportunities, in particular State Government agencies such as National Parks and Wildlife Service, Crown Lands and Department of Education
- continue to liaise with other regional land managers in Sydney north to share information and explore regional scale opportunities.

Table 2

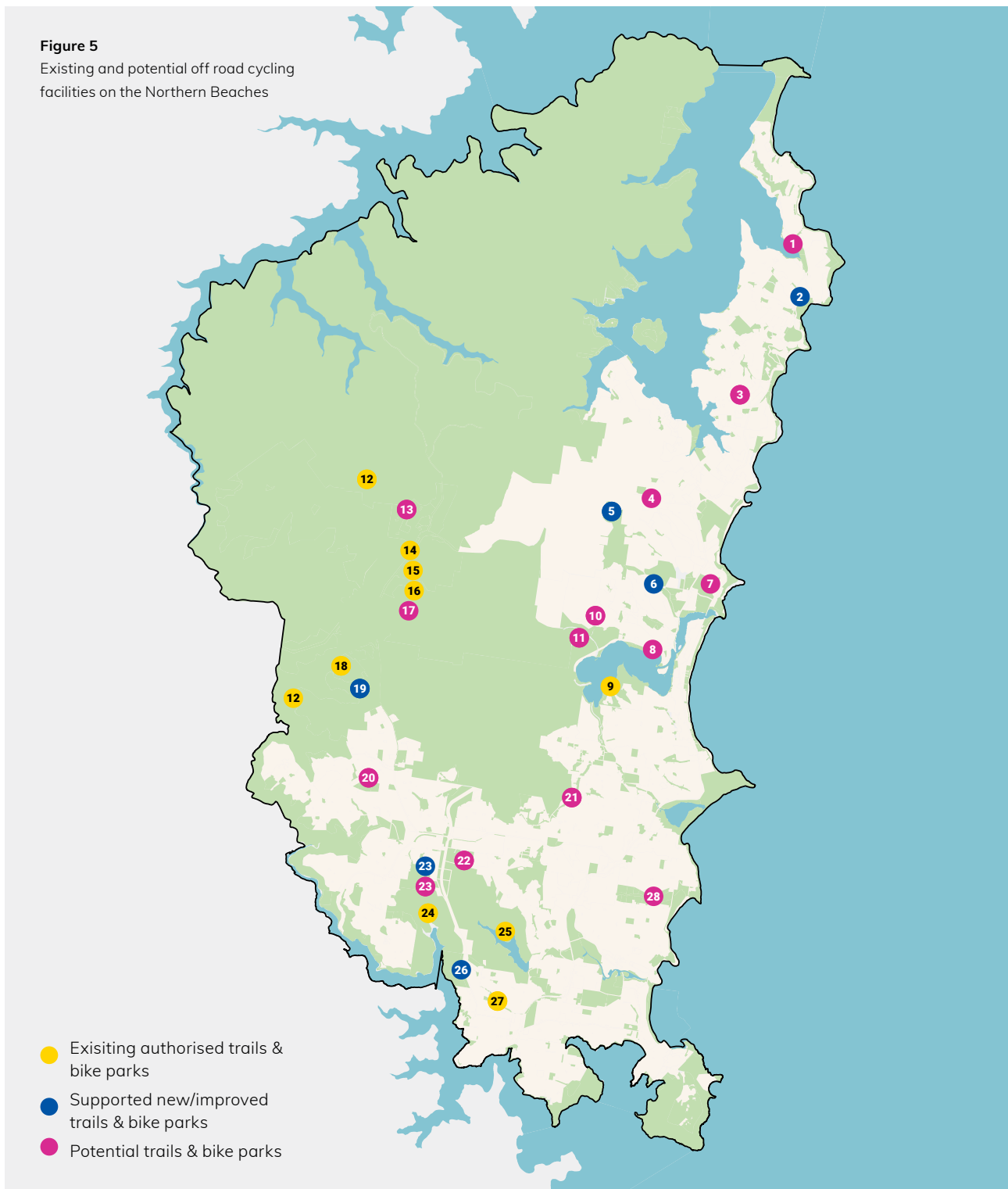
Northern Beaches Off Road Cycling: Existing, Supported and Potential Facilities. Further details are provided in the Action Plan.

Planning catchment	Trail/Facility - existing	Supported New/Improved	Potential New/Improved*
Manly	<ul style="list-style-type: none"> Manly Dam mountain bike trail The Grove Bike Park 	<ul style="list-style-type: none"> Manly Dam mountain bike trail improvements New intermediate to advanced bike park at Seaforth Oval 	<ul style="list-style-type: none"> Manly Dam - formalise Nemesis and Quarry mountain bike trails Liaise with the NSW National Parks and Wildlife Service and Transport for NSW regarding the potential to create/formalise safe linkages between the Manly Dam and Garigal National Park trails on either side of Wakehurst Parkway, including the Possums and Popeye trails. Include consideration of the proposed Beaches Tunnel project
Frenchs Forest	<ul style="list-style-type: none"> Bare Creek Bike Park Gahnia and Serrata mountain bike trails (NPWS) Garigal National Park fire trails 	<ul style="list-style-type: none"> Wyatt Ave, Belrose - Junior/ Beginner Bike Park Forestville Park - formalise Daisy Duke and Missys trails 	<ul style="list-style-type: none"> Forestville Park - investigate formalising Dirty Schnitty trail and links to Garigal National Park Lionel Watts - formalise bike dirt jumps
Terrey Hills	<ul style="list-style-type: none"> JJ Melbourne Hills Memorial Reserve - BMX track, pump track, dirt jump track, dual slalom track Terrey Hills fire trails (NPWS) 	<ul style="list-style-type: none"> JJ Melbourne Hills Memorial Reserve - formalise Guggenheim, Pony Express and Kamber Climb trails pending Council being appointed manager of Kamber Crown Road Reserve trails. Potential for additional mountain bike trails south of the BMX track 	<ul style="list-style-type: none"> Terrey Hills Oval - formalise bike dirt jumps JJ Melbourne Hills Memorial Reserve - Investigate potential for additional new off road cycling trails south of the BMX track
Mona Vale	Nil	<ul style="list-style-type: none"> Avalon Bike Park, potential locations include near the skate park and/or Careel Bay Ingleside Chase Reserve - formalise Mona Vale Downhill trail Bike park in Warriewood at Lynne Czinner Park 	<ul style="list-style-type: none"> Provide bike parks in Newport (Trafalgar Park), Mona Vale (Whitney Reserve - formalise dirt jumps), North Narrabeen (e.g. potentially at North Narrabeen Reserve, Bilarong Reserve and/or Boondah reserve) and Elanora Heights (Koorangi Reserve - formalise dirt jumps) Continue to work with NPWS regarding potential to formalise some mountain bike trails at Deep Creek
Brookvale - Dee Why	Nil	Nil	<ul style="list-style-type: none"> John Fisher Park - formalise dirt bike jumps near the netball courts Maybrook Avenue, Cromer - formalise dirt bike jumps

* Potential opportunities may require further feasibility work, including environmental studies, community engagement and planning approvals prior to approving for implementation.

Figure 5

Existing and potential off road cycling facilities on the Northern Beaches



- | | | |
|-------------------------------------|---|--|
| 1. Careel Bay Bike Park (Int-Adv) | 11. Deep Creek/Mt Narra Trails | 20. Lionel Watts Reserve Bike Park |
| 2. Avalon Bike Park (Junior) | 12. National Parks and Wildlife Service Fire Trails | 21. Maybrook Ave Bike Park |
| 3. Trafalgar Park Bike Park | 13. Terrey Hills Oval Bike Park | 22. Pipeline Regional Trail |
| 4. Whitney Reserve Bike Park | 14. Terrey Hills Pump Track | 23. Forestville Park Trails and Linkages |
| 5. Ingleside Chase Trail | 15. Manly Warringah BMX | 24. Gahnia and Serrate Mountain Bike Trails (NPWS) |
| 6. Lynne Czinner Bike Park | 16. Terrey Hills Dual Slalom Dirt Jumps | 25. Manly Dam Mountain Bike Trail |
| 7. North Narrabeen Bike Park | 17. JJ Melbourne Hills Trails | 26. Seaforth Oval Bike Park (Int-Adv) |
| 8. Bilarong Reserve Bike Park | 18. Bare Creek Bike Park | 27. Grove Bike Park (Junior) |
| 9. Narrabeen Lagoon Multi-use Trail | 19. Wyatt Ave Bike Park (Junior) | 28. John Fisher Park Bike Park |
| 10. Koorangi Reserve Bike Park | | |

3.4 Community engagement outcomes

Who we engaged

This consultation section summarises the outcomes from the community and stakeholder engagement conducted as part of the Northern Beaches Open Space and Outdoor Recreation Strategy. The consultation was conducted over a 28 week period, from December 2019 to June 2020, and consisted of a series of activities that provided a range of opportunities for community and stakeholders to contribute. The purpose of the consultation was to understand how the Northern Beaches community currently use open space including any emerging trends and what they see are the needs and gaps in the network.

A variety of consultation methods were undertaken to help maximise the opportunity for people across all different ages, abilities and locations to participate. The main consultation activities are summarised below. Written submissions were also received.

Further community feedback and input was sought during public exhibition of the draft Strategy in July and August 2022.



Social pinpoint mapping - December 2019 - February 2020

1,458 total comments

The site was open to the public and advertised via Council's Have your Say website, social media channels and the Manly Daily Newspaper. See Appendix C for a summary of comments.



Off road cycling rider survey - January 2020 - February 2020

1,770 responses

The survey was promoted via Council's social media and among key mountain biking and off road cycling groups.



Telephone survey - June 2020 - July 2020

403 participants

Participants were from a representative cross-section of the community. See Appendix B for a complete breakdown of participant data, methodology and responses.



Stakeholder meetings and workshops - February 2020 - June 2020

Workshops were conducted by Council with several key groups including:

- Disability and all abilities services
- Places for People Strategic Reference Group
- Manly Warringah War Memorial State Park Advisory Committee
- Narrabeen Lagoon State Park Advisory Committee
- Council's Youth services
- Off Road Cycling Stakeholder Group
- Headspace Youth Advisory Committee
- Seniors (via the Well to Wellbeing expo)
- Children - through Council's Vacation Care and Pre School programs
- Internal Council stakeholders
- Targeted stakeholder meetings with recreation clubs and resident and special interests groups



What the community value and appreciate

Across the consultation activities, respondents were asked to reflect on how they use open space and what they enjoy about it. The following key themes were identified as highly valued by Northern Beaches residents.

“Manly Dam is a gem; an oasis of natural beauty surrounded by suburbs. It’s possible to escape into this small wilderness and forget you’re in suburban Sydney.”

Social pinpoint participant

Diversity of opportunity

Community consultation showed the majority of people appreciated the diversity of the LGA’s recreation and open space network, with 82% of telephone survey participants satisfied with the size of open spaces and 73% satisfied with the diversity of space. This diverse network was highly valued across social pinpoint responses, with many responses highlighting that the range of different open spaces provided a variety of opportunities to engage with the space - from swimming and surfing, to hiking and cycling, picnicking, playing, walking the dog and participating in a range of organised sport.

Access to nature

Consultation participants indicated they greatly appreciate the natural areas in the LGA, noting that these areas provide peaceful spaces to relax, observe wildlife and connect with nature in an otherwise urban environment. This was particularly evident with 90% of telephone survey participants selecting ‘being in nature’ as their main reason for spending time in open space.

“The friends I have made in my 17 years of walking my dogs here have made my transition into the community so much easier”

Social pinpoint participant

Proximity and views

The majority of consultation participants appreciated having open space close to where they live, with 87% of telephone survey participants satisfied or very satisfied with their proximity to open space. Social pinpoint respondents also indicated they valued views of natural areas, particularly beaches and bushland, so close to home.

Wellbeing benefits

The community greatly valued open spaces as areas which support their health and wellbeing, with fitness/exercise (94%) and mental health (82%) listed as some of the main reasons for spending time in open spaces in the telephone survey.

Other community members reflected that using open spaces for recreational activities not only supported physical health but also provided an opportunity to meet new people and feel part of a larger community, providing a broader social benefit.

Environmental sustainability

A common thread through all community consultation was the desire to protect, preserve and use the LGA's natural open space assets in a sustainable way. People valued the existing habitats and wildlife across the LGA's open space network and wanted to see it protected for future generations. Off-road cyclists also sought opportunities to develop sustainable trails which aim to protect bushland areas and minimise disturbances.



What could be improved

Across the consultation activities, respondents were asked to reflect on key priorities or needs for open space on the Northern Beaches. In addition to requests for new facilities, such as playgrounds, bike parks, basketball facilities and outdoor fitness equipment, the following key themes were identified.

Supporting infrastructure and amenities

Consultation indicated there is a desire for improved supporting infrastructure in open spaces, with only 54% of telephone survey participants satisfied with the current level of supporting infrastructure. Upgrading/expanding services/facilities (e.g. playgrounds, toilets) was also the top priority when telephone survey participants were asked what could be improved about the open space network.

This was also reflected throughout the social pinpoint and stakeholder workshops, with facilities such as water bubblers, taps and toilets commonly raised as important amenities that could help improve the functionality of open spaces.

Some suggested that this supporting infrastructure could be included at the entrances to walking and off-road cycle trails, such as Deep Creek (authorised for walking only), Manly Dam and the Narrabeen Lake loop, as well as at off-leash areas, beaches and outdoor exercise stations. Facilities such as charging stations, meditation areas, shade and study spaces were also suggested by representatives in the youth workshop for inclusion in open space areas.

“My main issue is that I need to hop in the car to get to most of these open spaces ... I would like to see more nice open spaces within walking distance of people’s homes and improve pedestrian access”

Social pinpoint participant - Davidson

Connected and walkable open spaces

Based on the telephone survey, walking is the most popular recreational activity in the Northern Beaches, with 87% of respondents having participated in this activity in the past year and 79% of respondents visiting walking and cycling tracks at least once every couple of weeks.

It was identified by a number of social pinpoint respondents that more walking trails and shared pedestrian/cycleways were needed to help improve connections between open space areas and key places (e.g. from homes and shops).

Representatives from the all abilities workshop also highlighted the importance of people with needs being able to walk to open spaces, noting that this is an important skill for personal development. Connections to local open spaces were preferred as it was viewed that these spaces were less overwhelming for users.

People suggested that new or extended walking and cycling paths could be provided between Five Mile Creek and Deep Creek, at Wakehurst Parkway and along Pittwater Road. It is recognised that Five Mile Creek and Deep Creek contain unauthorised trails which straddle Council managed land and National Park.

Higher quality, cleaner open spaces

While many participants were satisfied with the overall provision of open space in the LGA, others saw opportunities for Council to direct resources to improving and upgrading existing spaces. This is evident across the telephone survey, with upgraded/expanded services/facilities and increased maintenance/cleaning listed as the top two open space improvement priorities.

Providing quality open spaces across the Northern Beaches is also a key priority for the community, with 79% of telephone survey participants regarding this as very important to them.

Some suggested that Narrabeen Lagoon could be improved with regular maintenance to improve the water quality and local ecosystems. Options include ensuring control of run off from tracks and paths into waterways. Others suggested regular cleaning of off-road and on-road cycling trails to remove debris, such as at Wakehurst Parkway, and along beach promenades.

More inclusive spaces

Representatives from the seniors, youth and all abilities workshops identified a need for inclusive open spaces and play spaces, where everyone has equal opportunity to use and engage in the space. It was suggested that subtle design improvements could be made which would enable greater inclusion and social interaction across all ages.

Suggestions included universally designed picnic tables, all-ages fitness equipment, spaces for carers or older people to sit, ramps, accessible toilets, for-hire wheelchairs and wide gates for prams.

Representatives from the all abilities workshop also highlighted that people with needs often visit places as a group and suggested open spaces be designed to support group activities.

“Clean open space is a valuable resource”

Social pinpoint participant

Greater education and signage for off-road cycling trails

The off-road cycling survey showed that the Northern Beaches is home to an experienced off-road cycling community, with most respondents having intermediate or advanced skills in this activity. However, education around authorised trails is lacking in the LGA. Approximately half (51%) of all respondents were not sure which trails were authorised for access and another 50% were not satisfied with the level of signage provided at trails. People suggested that clear signage and maps need to be provided at all off-road cycling trails to provide greater clarity around authorised routes and the type of skill level needed to complete the course.

“Proper signage and regular maintenance throughout the [off-road cycling] network would be great. Education to riders about endangered plants and animals etc. should be part of the plan”

Off-road cycling survey participant

Off-road cycling amenities and trail diversity

Similar to open space, consultation with off road cycling users indicated there is an opportunity to improve the level and type of supporting infrastructure at trails. Over half (53%) of off-road cycling survey respondents were either very dissatisfied or not satisfied with the existing provision of supporting infrastructure. Survey respondents suggested this provision could be improved by:

- providing bike stations at off-road cycling trails where users could service their bike (e.g. wash/pump tires), access drinking water and view emergency access information. The bike station at Terrey Hills was suggested as a good example which could be rolled out on other trails
- increasing access to carparking near off-road cycling trails
- providing a bus or chair-shuttle service for downhill riding trails
- investigating opportunities to locate a café or coffee van near popular off-road trails (such as Deep Creek) to provide spaces for people to relax and socialise.

Off-road cycling survey respondents also commented on the need for a more diverse trail network, with 46% of users either very dissatisfied or not satisfied with the range of difficulty levels currently available. Given most respondents had intermediate - advanced skills across all off-road cycling activities, there is a likely to be increased demand for higher-order trails and skills parks. Off- road cycling survey respondents suggested a new mountain biking skills park (with parallel running jumps and drop lines) could be provided to help encourage skills progression in a safe and accessible environment, similar to Greenvalleys Bike Park in Tongarra, NSW

“We need trails that can be legally used for racing and that cover all disciplines. We need trails that allow for progression of skills and for an ever growing user group”

Off-road cycling survey participant

“...if there was a more formal network with more formalised infrastructure (e.g. car park, water stations, signage) it could be world class mountain biking. In terms of missing features, the ability to progress and ride technical features is a must have”

Off-road cycling survey participant



Ideas and opportunities

Across the consultation activities, respondents were asked about their current recreational activities and any new activities they would consider trying. Respondents were also asked for suggestions to improve the use and functionality of open spaces across the Northern Beaches. Below is a summary of some of the ideas and opportunities provided by the community.

“Open grassed parkland is flexible and used for so many different activities..”

Social pinpoint participant

Increased public access

Many social pinpoint respondents requested increased access to beaches and sportsfields for dog exercise.

Some suggested that access to sportsfields and beaches for dog exercise could be made available outside of peak and competition hours and other times where public usage is lower.

Across the responses there was strong support to allow dog- walking along Palm Beach, Mona Vale Beach, Newport Beach, Bilgola Beach and North Curl Curl Beach. Others suggested greater public access to sportsfields, such as LM Graham Reserve, for personal recreation outside of peak and competition hours.

Protect conservation areas and practice sustainable use

Consultation indicated the community highly value natural areas for their conservation role. Some suggested that these areas, particularly at Lakeside Reserve, Nolan Reserve and Manly Dam, should be protected further by increasing conservation areas and restricting the development of hard infrastructure (e.g. courts, cycle paths).

The telephone survey also showed that the top factor influencing open space satisfaction was the sustainable recreational use of natural areas (see Appendix C). This supports the continued need to integrate conservation and sustainability principles in future open space planning.

“...we need to protect and rehabilitate these natural areas so that we can enjoy them for generations to come”

Social pinpoint participant

Increased accessibility through information

Participants in the all abilities and disability sector workshops suggested that access could be improved by providing more detailed information on the LGA's open space areas. This allows users to choose if a space is accessible for them, rather than relying on disability standards which can be limiting and not aligned to individual ability.

Some suggested this information could be presented as an online catalogue or app, where people can easily see details about the size, layout and features of each area. Representatives from the disability sector suggested using the 'Naturally Accessible' guidelines, which provides directions on how to make bushwalking and natural areas more accessible for people with mobility based disabilities.

Embedding visual behavioural leads within playgrounds was also suggested by the all abilities sector. This may include arrows on the ground or signs to encourage sharing on play equipment, helping to support positive behaviour for all, including children with behavioural or intellectual needs.

The disability sector suggested for Council to use the 'Naturally Accessible' guidelines, which can be found at naturallyaccessible.org, to help increase the accessibility of bushwalking and use of natural areas.

Disability sector workshop

Managing commercial and community beach use

Beaches are one of the most visited open spaces across the LGA, with 82% of telephone survey participants visiting a beach at least once every couple of weeks. Unsurprisingly, the Manly catchment had the highest rate of beach use, with 90% of telephone survey respondents from the catchment visiting a beach at least once every couple of weeks (compared to 75% in Terrey Hills/Frenchs Forest).

Alongside general public use, many of Council's beaches support a range of recreational uses which require bookings from stakeholders, such as swimming clubs, organised fitness groups, adventure activities (e.g. para gliding) and professional sporting competitions.

Workshop participants indicated that many of these groups compete for the same dates across Council's busiest beaches at Freshwater, Manly and Long Reef, creating pressure to ensure there is an equitable provision of commercial and public access.

To help with this, it was suggested that Council develop a clear guideline or policy for managing beach uses. It was suggested that this could outline which beaches are available for commercial hire, the maximum frequency and capacity of events, as well as recommendations for bookings to be undertaken at less popular beaches to help maintain public access.

Invest in strategic off road cycling linkages and authorised trails

While a popular activity, 68% of off road cycling rider survey respondents felt that the current network of authorised off road cycling trails on the Northern Beaches do not meet their needs. There were relatively high levels of dissatisfaction with the distance of trails (43% very dissatisfied - not satisfied), the variability in difficulty levels (46%) and supporting infrastructure (53%).

To help improve the off road trail network, there was strong support among survey respondents to increase the number of authorised trails in the Northern Beaches, with many commenting that these trails provided a better riding experience and difficulty level compared to Council's trails. These included informal or unauthorised trails at:

- Garigal National Park
- Deep Creek/Mt Narra
- Manly Dam

Others also suggested for Council to create more internal linkages between off- road cycling trails to reduce the need to cross busy roads and to enable safer access. Key linkages were suggested between:

- Manly Dam and Garigal National Park
- Narrabeen and Terrey Hills - particularly to reduce the need to cross Mona Vale Road and Wakehurst Parkway
- Seaforth and Frenchs Forest hospital precinct
- Manly to Dee Why

These linkages would be particularly important in the Terrey Hills and Frenchs Forest catchments, with the telephone survey indicating that most off-road cycling users (47%) resided in these catchments. This represents a considerably higher rate of users compared to Brookvale Dee-Why (13%) and Manly (18%).

Although not Council land, the Red Hill area is of high value to riders.

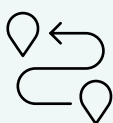
“There is a lot of potential to work with the local riding communities to develop the area for mountain biking and sustainable trail networks and facilities”

Off-road cycling participant



Community Profile Snapshot

In 2021, the Northern Beaches LGA had an estimated population of 270,642 people*. This population is growing. By 2036, the number of people is expected to increase to 304,025 representing a 12% growth. The following provides a snapshot of the key characteristics of the Northern Beaches community to help understand the key trends which will impact on open space planning in the LGA.



We love living and working locally

The Northern Beaches has strong local ties, with 50% of people living at the same address as five years ago. Over 80% of residents also work within the LGA, representing the highest local workforce in Greater Sydney.



We are socially advantaged

The Northern Beaches is one of the most socially advantaged areas in Sydney, being in the top 10% of NSW LGAs for social and economic advantage. There are some small pockets of disadvantage in the communities of Narraweena and Dee Why.



We have high proportions of families

The Northern Beaches lifestyle and amenity have generally attracted older families, with mature adults (45 - 64 years) representing 26% of the population and young people (5 - 20 years) representing 20%. The largest proportion of the family households are couples with children (37%), followed by couples (27%) and lone persons (22%)*.

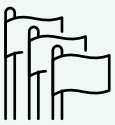


We are using public transport more

Prior to Covid-19 the Northern Beaches experienced an 28% uptake in public transport use from 2011 to 2016.

Currently, 20% of the population use public transport to travel to work. The continued investment in public transport within the LGA is expected to drive this growth in the future.

Source: ABS census data derived from .id on Council's website, Tourism Australia (via Economy id) and HealthStats NSW. 2021 population data has been used where indicated () and was sourced from id.community. However, note that the proposed Ingleside development (an estimated 3,000 people) is no longer proceeding and this will be reflected in future demographic population forecast modelling.



We are diverse, but less multicultural than Greater Sydney

The Northern Beaches is home to a diverse range of age groups, however most people are of European ancestry (65%) and speak English only at home (85%). The most multicultural suburbs are at Dee Why - North Curl Curl, Beacon Hill - Narrabeena and Forestville - Killarney Heights.



We need continued health and active living support

Like most NSW councils, the Northern Beaches will experience an ageing population. From 2021 and 2036 the number of retirees (65 years and over) will grow by 35%. Trends also indicate the LGA will age faster than Greater Sydney, with expected decreases in the number of adults and young adults to other areas.



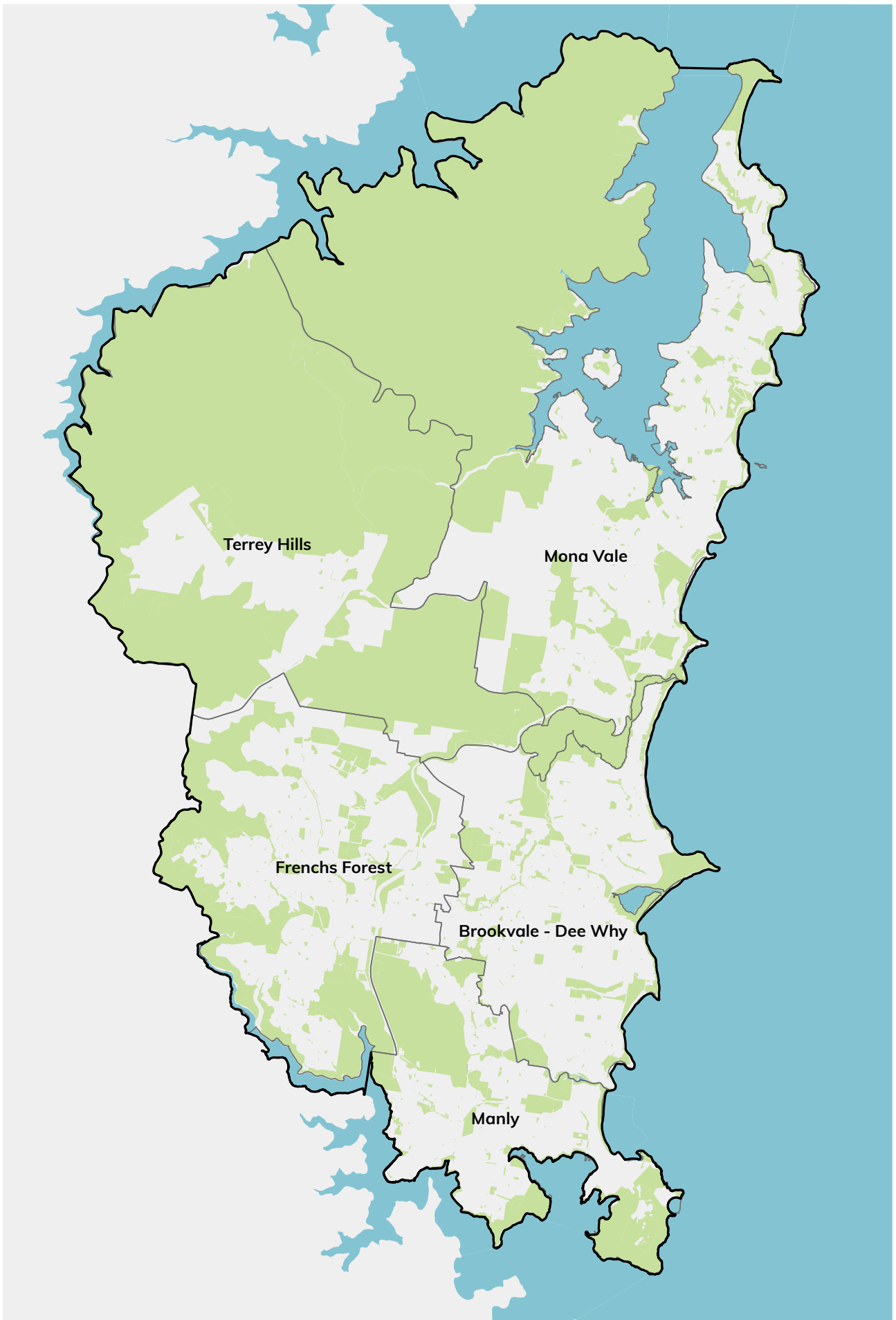
We are an attractive visitor location

The natural beaches, waterways and bushland attract large numbers of domestic and international tourists to the LGA. Tourism Australia indicates there were 3,327,011 international and 1,530,332 domestic overnight visitors in 2019. This represents 3.4% and 1.3% of all international and domestic overnight visitors in NSW.



We need to increase activity in children

Only 22% of children (aged 5 - 15 years) undertook adequate physical activity in 2017 - 2018 in the Northern Sydney Local Health District (where the LGA is located). This is lower than the NSW average (24%).



Catchment Demographics

Mona Vale

2021 - 63,806 people 2036 - 69,061 people

Mona Vale has one of the lowest population densities, with close to half of the area consisting of National and State Parks (predominantly National Park). The area has a similar make up to Frenchs Forest, being a predominately family area with high car ownership rates. However, there is some housing diversity in the area, with greater rates of medium density housing along the coastline. Note that the proposed Ingleside development (an estimated 3,000 people) is no longer proceeding and this will be reflected in future demographic population forecast modelling.

Terrey Hills

2021 - 3,869 people 2036 - 4,257 people

Terrey Hills has the smallest catchment population in the LGA and will experience 7% growth over the next ten years. The catchment is predominately semi-rural, with most residents on larger lots bordering bushland. Terrey Hills has an older population compared to the LGA. A third of the population are mature adults (45 - 64 years) and 19% are retirees (65 years and over), compared to 27% and 17% respectively in the LGA.

Brookvale - Dee Why

2021 - 100,191 people 2036 - 110,131 people

Brookvale-Dee Why has the largest population and is also the youngest and most culturally diverse. The area has experienced continual development over the past 10 years and has the most diverse and affordable housing mix, with nearly half of all dwellings as flats, units or apartments. The area also has some of the most socially disadvantaged communities in the LGA around Narrabeena and Dee Why.

Brookvale-Dee Why is home to the largest employment hub, accommodating a third of all jobs approximately in the LGA. This is likely influenced by its location, being the only centre which is accessible to other centres in the Northern Beaches within 30 minutes on public transport.

Frenchs Forest

2021 - 39,809 people 2036 - 55,012 people

Frenchs Forest is a low density, family area. Detached houses represent 86% of all dwelling types and the catchment has one of the highest proportions of couples with children in the LGA. The catchment is also very car-orientated and has high numbers of cars per household compared to other catchments.

However, the area of Frenchs Forest will change considerably with the development of the centre as a health and education precinct. This will increase densities and population growth, with the catchment experiencing the largest population growth (38%) in the LGA. This may have an impact on the need and demand for open space in the future.

Manly

2021 - 62,967 people 2036 - 65,564 people

Manly has one of the largest population densities within the LGA and is a hotspot for young professionals. This is likely influenced by the availability of good public transport connections to the Sydney CBD, with the catchment also having the highest rate of active transport use in the LGA.

Manly is also home to some of the LGA's most recognisable beaches and is a popular tourism destination for local and domestic visitors.

4.2 Trends and benefits

Benefits of open space

There are widespread benefits to the use and provision of open space. In the Northern Beaches, the consultation feedback showed that most people use open space for health and wellbeing purposes. This trend is reflected in academic research and literature, which regularly highlights health and social development as key benefits of open space provision. Furthermore, a more cohesive, connected and engaged community are key factors in building community resilience.

The following table summarises the key Australian and international literature on the benefits of open space. A reference list of all sources is provided at the end of this report.

Benefits	Research
Mental health	Contact with nature is widely considered important for general mental health. Studies have demonstrated that on average, individuals have both lower mental distress and higher wellbeing when living in urban areas with more green space (White, et al. 2013). Frequent visits to green spaces have also been associated with lower levels of perceived stress and lower cortisol levels (Grahn and Stigsdotter 2010, Roe, et al. 2013, Giles-Corti et al. 2012). Access to the natural environment has been shown to help individuals recover from acute stress and mental fatigue better than other environments (Bodin and Hartig 2003, van den Berg et al. 2016) as well as helping to reduce depression (McCaffrey, et al. 2010, Berman, et al. 2012). Several studies have shown even just exposure to green views can reduce stress and encourage relaxation (Kahn, et al. 2008).
Physical health	The provision of attractive, green spaces create opportunities for people to engage in physical activity. While physical activity has many health benefits, research has also shown that the environment the physical activity is conducted in can also have health benefits. Physical activity undertaken in green or natural environments is thought more beneficial than other types of exercise. For example, running in a park is associated with a more restorative experience compared with the same exercise in an urban environment and has been linked to important health outcomes including lower blood pressure (Astell-Burt, et al. 2014, Marselle et al. 2013, Bodin and Hartig 2003, Wolf and Robbins 2015). Studies have also shown that residents living in neighbourhoods with more green space were more likely to participate in physical activity than those living in areas with less green space (McMorris, et al. 2015, Villeneuve et al. 2015). An Australian wide survey of adults over 45 years identifies that those living in neighbourhoods with <20% green space were significantly less likely to walk and participate in moderate to vigorous physical activity at least once a week, than those living in areas with >20% green space (Astell-Burt, 2014).
Social connectedness	There is growing evidence that access to green space enhances social cohesion due to the opportunities for community interaction. Access to outdoor green space within neighbourhoods has been associated with an increased sense of community (Kearney 2006, Sugiyama, et al. 2008, Giles-Corti et al. 2012). Off leash areas for dogs are particularly important spaces in building social cohesion, as dogs can function as 'social lubricants' to help initiate conversations and build relationships between neighbours. Neighbourhood connection, social capital and a strong sense of community are important because these have all been shown to be associated with improved wellbeing, increased feelings of safety and security, participation in community affairs and civic responsibility. Access to urban green space has also been linked to positive indicators of functioning societies, such as reduced fear and reduced levels of crime (Kuo and Sullivan 2001).

Benefits	Research
Environmental	<p>The environmental benefits of green open space are many and varied. The densification of urban areas is associated with changes in the local climate (e.g. urban heat island). Green spaces can provide a cooling effect that moderates the urban heat island and several studies have identified that vegetated areas have a cooling effect between 1- 4 °C, decreasing with distance from the green space (Derkzen, et al. 2015). In a context of climate change, with the expected increase in temperature and intensity of heat waves, green areas are even more important as they can create a cooling effect that extends to the surrounding areas.</p> <p>Green open spaces also assist in managing hydrological processes such as stormwater drainage, runoff mitigation, soil water storage and water purification. They also sequester and store carbon, help reduce noise pollution by serving as natural sound buffers and improve air quality by filtering atmospheric particulates such as nitrogen dioxide, particulate matter and sulphur dioxide.</p> <p>Green spaces contribute to biodiversity and protection of native species by providing food sources and habitat for wildlife. Planning, design, management and maintenance of open spaces and facilities should consider resilience and energy efficiency in order to mitigate and adapt to a changing climate and the associated impacts from increased frequency and intensity of extreme weather events including storms, rain, floods, erosion and periods of drought.</p>
Childhood development	<p>Contact with nature is thought to play a crucial role in the brain development of children. Green spaces provide children with opportunities for risk taking, discovery, creativity, mastery and control, which strengthens sense of self, inspires basic emotional states (e.g. sense of wonder), and enhances psychological restoration which are all thought to influence different aspects of cognitive development (Bowler, et al. 2010, Dadvand, et al. 2015). Repeated and regular contact with green space at school has also been associated with improvements in children's confidence, motivation and concentration, language and communication and physical skills (Dadvand, et al. 2015).</p> <p>Risky play is increasingly seen as crucial to a child's development and can provide benefits such as development of motor skills, improved awareness of the capabilities and limits of their own bodies, understanding consequence to action, increased confidence, independence and resourcefulness and increased creativity and inventiveness.</p> <p>Physical inactivity in children is a growing public health concern. Regular physical activity in children is associated with numerous benefits, including improved cardiovascular health, reduced risk of type 2 diabetes, and less symptoms of depression and anxiety (Janssen and LeBlanc 2010). Studies have found exposure to green space is associated with higher physical activity in children and neighbourhood context is an important factor influencing physical activity in children (Ward, J. et al. 2016, Villanueva, et al. 2015, Badland et al. 2015). For example, the presence of sport ovals and parks has been shown to be associated with moderate to vigorous physical activity in young people, particularly when located within 800 meters of their homes (Giles-Corti, et al. 2009, Villanueva, et al. 2015, Badland et al. 2015).</p>

Open space trends

A network of interconnected spaces

Parks and recreation facilities should be planned and managed as an interconnected network, with a variety of spaces delivering a range of opportunities for activity and recreation. The NSW Government Architect promotes the delivery of a 'green grid' (with recreational, hydrological, ecological and agricultural elements) across Sydney that provides a high-quality network of green spaces connected to transport hubs, homes and town centres. Strategically planning for a network of spaces means you are not relying on one space to provide everything for everyone, but rather you are ensuring that people have good access from wherever they are, to leisure and recreational opportunities to support their health and wellbeing.

Implementing the green grid requires planning for gaps in existing provision and improving both walking and cycling links across parks and recreation facilities.

This approach recognises the importance of providing a diversity of spaces that are within walking distance to where people live and work. It also recognises streets as critical recreation places and connections to open space. Active, green, walkable streets improve connections to open space as well as providing additional opportunities for recreation. Through verge planting, traffic calming, wide footpaths, seating, shade, and places to stop such as parklets or skate and play features, streets can provide places for existing and future residents to socialise and come together with neighbours. Council's Northern Beaches Public Space Vision and Design Guidelines (2021) will help support this.

Supporting healthy living

Increasing obesity rates are evident within Australia due to poor diet and lack of exercise. There is a need to ensure that our open space can support and encourage physical activity for all ages, cultural and socio-economic groups. Access to open space can help promote healthy living, with studies showing that residents who live in neighbourhoods with more green space are more likely to participate in physical activity than those living in areas with less green space (McMorris, Villeneuve et al. 2015).

Walking is consistently the most popular physical activity across a broad spectrum of the community which highlights the importance of walking paths and pedestrian friendly streets. Walking for recreational purposes was identified as the top physical activity in NSW based on Ausplay data for adult participation in sport and non-sport physical activity. Ausplay data also suggests an increased participation in 'casual' or 'non-organised' physical activity compared to 'organised' activity.

Provision of quality walking and cycling routes can help meet demand for this type of activity and encourage healthy lifestyles. Linking parks and outdoor recreation facilities with good walking and cycling pathways can increase access to open space for all members of the community. Recreational facilities within open space, such as play spaces, fitness stations, paths and trails, courts and fields, are also critical for helping encourage an active and healthy lifestyle.



Acknowledging the benefits of connection to nature in supporting mental wellbeing is also important when planning for open space. Evidence shows that views of green space or water help reduce stress levels (Thompson et al. 2012), so planning spaces that maximise access to and views of nature (including rooftop gardens, green walls and the incorporation of natural materials in the built environment) will be critical to supporting the mental wellbeing of the community into the future.

Multipurpose and flexible

People's recreational pursuits are more varied than ever, both when they participate and what activities they participate in. This has contributed to the trend towards more multipurpose, flexible spaces that can support a variety of uses and activities at the same time. Provision of multipurpose, flexible spaces in close proximity to people can offer a range of recreational and leisure activities. This can include co-locating different recreational facilities together in one park (e.g. a playground with seating areas and a sportsground, surrounded by a walking track) or it can be one space serving multiple functions (e.g. netball courts also providing a learn to ride space). These spaces can maximise usage and meet a greater range of recreation needs within the same area.

This trend sees traditional sporting facilities, such as sportsgrounds and courts, function as community gathering spaces or places for individual exercise when not hosting an organised team game, and passive parks incorporating more active elements such as fitness stations and half courts.

As the community continues to grow, there will be limited ability to provide more parks, fields and courts. Ensuring that existing spaces can accommodate multiple activities is the best way to maximise their potential.

Quality and amenity

To encourage people to spend more time exercising and in nature, open spaces and recreational facilities must be designed with the user in mind. Quality open spaces do not necessarily mean high levels of investment or significant ongoing maintenance - rather they are spaces that consider design elements that make them pleasant to use and able to support high levels of use. This includes providing facilities on land suitable for the intended use and incorporating appropriate amenities such as shaded seating areas, sustainable landscaping, universal access design and toilets where appropriate. One study found that certain attributes (e.g. playgrounds, walking paths, wildlife, water features, grassed areas, gardens, off-leash areas for dogs and amenities) were key attractors for walking to public open space regardless of their size (Sugiyama et al 2015). Sugiyama's study also concluded that providing fewer higher quality parks was preferable to building a larger number of smaller lesser quality parks.

As Sydney continues to experience increased temperatures, it will also be important to consider design opportunities to reduce the ambient temperature including integrating water into public open space, green walls, tree canopy, planting and the use of lighter and reflective building materials.

Realising the full potential of the network

With increasing population growth and limited opportunities to deliver new open spaces, there is a trend towards thinking innovatively to get the most out of existing spaces. This involves identifying areas of unused or underutilised open space and considering ways to make the most out of these spaces. This can be existing spaces reserved for schools or sporting clubs, or transforming irregular or vacant parcels of land, redundant roads, laneways, roofs and unused parking spaces into useable open space.

While the Northern Beaches has a very high provision of open space, much of this is within State and National Parks. To help meet future demand for local park spaces and recreation facilities such as sportsgrounds and courts, it will be important to consider some of these innovative approaches.

Many schools have sportsgrounds, courts and playgrounds which can be underutilised outside of school hours. Council continues to explore shared use agreements with schools or other organisations with open space assets can help unlock these spaces to enable them to be used by the community out of hours. Partnerships with National Parks are also important to help create strategic links between walking, horse riding and off road cycling trails.

The NSW Department of Education encourages members of the community and education groups to use school facilities (in line with agreements) when these are not required by the school and have developed a Community Use of School Facilities policy to support this initiative. Council has a Memorandum of Understanding with the NSW Department of Education to explore partnership opportunities to benefit schools and the local Northern Beaches community.

4.3 Best practice guidelines

Best practice planning for open space

Historical open space planning relied heavily on population-ratio and area-percentage benchmark standards such as 2.83ha/1,000 people. These blanket spatial standards are no longer considered effective when planning for open space as they do not consider many of the factors needed to develop a nuanced assessment of needs, such as variations in residential densities, community preferences, quality and natural assets.

Leading practice open space planning favours an approach to assessing open space needs using performance criteria and key indicators as a benchmark.

The NSW Government Architect's (GANSW) Draft Greener Places Design Guide (2020) provides a set of performance outcomes that identify the range of recreation opportunities to be provided and the characteristics of an acceptable solution to cater for recreation needs in open space. The guide describes the performance criteria used to assess the open space network and emphasises consideration of design elements such as accessibility, the provision of a network of interconnected spaces and the provision of high-quality open spaces that accommodate a diverse range of uses. Each criteria have a set of performance indicators that collectively provide the parameters for the identification of needs.

Key directions from the guide to consider when planning open space for Northern Beaches LGA include:

- desirable minimum size of a local parks is 3000sqm (or 1,500sqm in high density areas where more efficient provision does not exist or opportunities for re-use of small spaces arise), and desirable minimum size of local parks in medium to low density areas is 5000-7000sqm
- residents must be within a 5 minute or 400m walking distance to a local park (200m in high density areas), a 25 minute or 2 km walking distance to any district park (2ha+) and 5-10 km from most houses to regional open space
- quantity of open space should be considered in terms of the number of opportunities available for active and passive recreation - a variety of spaces should be provided to cater to different demands and age groups.

Taking a leading practice, place-based approach to understanding open space needs involves:

- identifying areas of open space deficiency, using open space performance criteria and indicators as a benchmark including accessibility, diversity, quality and sizes
- understanding how the community currently uses open space and identifying community need and preferences through community consultation
- understanding how the community might grow and change in the future and how this might impact their use and demand for open space
- ensuring future open spaces are planned and designed in accordance with performance-based needs assessment.



Benchmarking for open space

This Strategy takes a leading practice approach for open space planning, combining both quantitative and qualitative measures to guide future provision. This is aligned with leading practice measures which focus more on the principles of accessibility, connectivity, equitable distribution, diversity and quality.

While standards and benchmarks are a useful reference, they do not consider many of the factors needed to develop a nuanced assessment of community need requirements and rarely reflect the complexities for planning for open space in established areas. Where standards are used in contemporary open space planning, they are used mostly as a reference or checking point, rather than the sole driver for the quantity of open space provision. Recommendations for this study have taken a holistic approach to understanding needs and tested this against contemporary benchmarks.

Provision rates

There is no agreed approach to determining an appropriate quantum of provision for open space. The table on the following page shows the provision rate of open space per 1,000 people for selected metropolitan Sydney local government areas. These rates have then been compared to the Northern Beaches LGA.

The Northern Beaches has a higher rate of open space provision compared to other local government areas in metropolitan Sydney. This is true even when excluding open space areas which other council areas do not have access to, such as golf courses, national parks, beaches and foreshores.

As the table on the following page shows, open space provision varies somewhat between Sydney council areas.

Benchmarking tables

The following pages contain benchmark comparisons of open space and outdoor recreational facilities from other metropolitan council areas. This data has been based on published open space and recreation strategies from different councils. See the reference list for complete details.

Given most of these council strategies have relied on 2016 ABS Census data, the 2016 population data for the Northern Beaches LGA has been used to provide a similar comparison.

The data and benchmarks presented in this section are referred to throughout the Strategy.

Benchmarking open space provision

Local Government Area	Population 2016	Open space in hectares	Open space provision
City of Parramatta*	226,149	207ha (parks only excludes 150ha of sportsground and natural areas)	0.9ha/1,000 people
City of Sydney*	208,374	386ha total 189.5ha Council owned	1.8ha/1,000 people 0.9ha/1,000 people of just Council owned and managed open space
Inner West Council*	192,000	323.4ha total 246ha Council owned parks and sportsgrounds	1.7ha/1,000 people 1.3ha/1,000 people of just Council owned open space (parks and sportsgrounds)
Blacktown City Council*	336,962	5,513ha total, including conservation areas, public and regional recreation areas (SEPP, RE1, REP, UL) 1,770ha parks	16.3ha/1,000 people 5.2ha/1,000 people of parks only
Georges River Council*	153,450	477 ha, including golf courses, parks and reserves	3.1ha/1,000 people 2.7ha/1,000 people (excluding golf courses)
City of Canterbury-Bankstown**	346,302	1,131ha	3.3ha/1,000 people
Bayside Council **	156,058	422ha	2.7ha/1,000 people
City of Canada Bay Council **	88,015	203ha	2.3ha/1,000 people
Northern Beaches Council	265,468	14,501 ha (includes all urban parks, natural areas, beaches and foreshores, and national parks)	54.6ha/1,000 people

*Provision based on Council open spaces strategies - see References for details

**Data compiled by Tyrrell Studio and the NSW Government Architect's Office as part of the Sydney Open Space Audit (2016), provided by email by NSW Department of Planning and Environment. The figures do not include golf courses.

Benchmarking recreational facilities

The below tables show a comparison of the provision of playspaces and skate facilities by different Sydney metropolitan Council areas. Where possible, only the numbers of Council owned facilities have been included to provide a comparable comparison to the Northern Beaches. Like open space, these provision rates vary by Council area.

Local Government Area	Population 2016	Playspaces (count)	Playspaces (ratio)	Skate facilities (count)	Skate facilities (ratio)
City of Parramatta	226,149	142	6:10,000	4	1:50,000
City of Sydney	208,374	90	4:10,000	Approx. 4	1:50,000
Inner West Council	192,000	116	6:10,000	4	1:50,000
Blacktown City Council	336,962	330+	10:10,000	3	0.5:50,000
Georges River Council	153,450	65	4:10,000	1	<0.5:50,000
Northern Beaches Council	265,468	217	8:10,000	10	2:50,000



5.0 Strategic directions and actions

The Northern Beaches has very good provision of open space, with a large area and large number of parks, open spaces and recreation facilities, although there is room to improve the quality and experience to ensure that we continue to meet the needs of residents and visitors.

Following the analysis of current open space and outdoor recreation facility provision, community input and consideration of future needs, this section outlines the strategic directions and actions that have been designed to ensure that we continue to meet the recreational needs of Northern Beaches residents.

5.1 Strategic directions

The strategic directions and actions respond to the identified needs for the Northern Beaches community. In particular, the strategic directions build on the opportunities and address the challenges identified throughout this document.

The actions detailed in section 5.2 are each aligned under the following six key strategic directions:

1. Inform and understand

Support the local and wider community to understand, use and care for the wide range of open spaces on the Northern Beaches.

2. Links and loops

Create a better connected and more accessible open space network, with improved walking and cycling connections.

3. Better and brighter

Enhance the use, quality, sustainability and resilience of existing open spaces through targeted embellishments and design improvements.

4. Growth and gaps

Provide new and enhanced open space, and enable multipurpose use of space, to support residential growth and address key provision gaps.

5. Management and planning

Ensure management of open spaces, including planning, policies, processes and events are flexible, responsive and viable.

6. Ongoing maintenance

Maintain open space to maximise opportunities for users to access high quality spaces and facilities.

5.2 Action plan

This Action Plan section outlines the range of actions recommended to meet current and future community needs and recommended to be implemented from 2022 to 2036. Implementation is dependent on resourcing, funding and planning approvals, environmental assessments, and will be informed by community feedback. Grant funding and other external funding will also be sought as opportunities arise. The recommended actions:

- Are aligned with one or more of six strategic directions and are underpinned by the principles specified in section 2.0 and Council's Community Strategy Plan.
- May be delivered over multiple financial years.
- Will be reviewed and updated in years five, ten and fifteen.
- Are proposed to be considered in a timeframe linked to Council's Resourcing Strategy as follows

Indicative Delivery Timeframe	Proposed Resourcing	Information about Resourcing
Current 22/23	Operational Plan and Budget 22/23.	1. Council's Operational Plan and Budget 22/23 details actions planned to take place 22/23 and is year one of the Delivery Program 2022-2026.
Short Term 23/24 to 25/26	Delivery Program 2022-2026 (years 2, 3 and 4). Actions with this timing are proposed to be undertaken and unfunded until approved in the Operational Plan and Budget (except where grants are approved)	2. Council's Delivery Program 2022-2026 sets out the work Council proposes to undertake over the next four years as part of the delivery of community outcomes and goals of the Community Strategic Plan. The Delivery Program is informed by strategies and plans including this Open Space and Recreation Strategy.
Medium Term 26/27 to 31/32	Long Term Financial Plan 22/23 to 31/32. Actions with this timing are unfunded until approved in the Operational Plan and Budget (except where grants are approved)	3. Council's Long Term Financial Plan - sets out how Council will financially resource its commitments in the most sustainable way and is a rolling 10-year plan updated annually.
Long Term 32/33 to 36/37	To consider for a future Delivery Program 32/33 to 36/37. Actions with this timing are outside the timing of the current Long Term Financial Plan and are unfunded until approved in the Operational Plan and Budget. (except where grants are approved)	See 3. above.
Ongoing Service	Operational Plan and Budget 22/23. Actions with this timing are proposed to be considered annually and are unfunded until approved in the Operational Plan and Budget. (except where grants are approved)	See 2 and 3 above.

To support a user-friendly layout, acronyms are used to refer to the catchments:

- Brookvale-Dee Why (BDW)
- Frenchs Forest (FF)
- Manly (M)
- Manly Vale (MV)
- Terry Hills (TH)

Under the Resourcing column, acronyms used are;

- Long Term Financial Plan (LTFP)
- Delivery Program (DP)
- Operational Plan and Budget (OPB)

Under the Responsibility column the following business units are referred to:

- Parks and Recreation (P&R)
- Environment and Climate Change (E&CC)
- Community Arts and Culture (CA&C)
- Property (P), Strategic and Place Planning (S&PP)
- Transport and Civil Infrastructure (T&CI)
- Capital Projects (CP)
- Environmental Compliance (EC)
- Place and Economic Development (P&ED)
- Waste Management and Cleansing (WM&C)

106 1. Inform and understand

Support the local and wider community to understand, use and care for the Northern Beaches' wide range of open spaces.

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
IU 1	Continue to work with the community and key community stakeholders to understand and better meet existing and future recreation needs.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R E&CC
IU 2	Consider development of a multi-use environmental and Indigenous education space at Manly Dam.	M	Long term	Consider in DP & LTFP	P&R
IU 3	Promote opportunities for sustainable nature-based tourism and recreation in line with the Northern Beaches Destination Management Plan (2021).	All	Short to long term	Consider in DP & LTFP	P&ED E&CC P&R
IU 4	Promote opportunities for activities that allow for the experience of nature appreciation.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	E&CC P&R
IU 5	Motivate, inspire, educate and support our community and stakeholders to value, protect and enhance bushland, catchments and waterways, including recreation spaces, and by facilitating, supporting volunteering such as at bike parks, gardens and natural areas, including Manly Dam.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R E&CC
IU 6	Develop and promote education programs which support the recreational users (e.g. bike riders, walkers and dog walkers) to understand, value and protect local bushland and other ecosystems.	All	Ongoing service	Consider annually DP, LTFP	E&CC P&R
IU 7	Integrate art, culture and heritage into the design of our open spaces in creative and innovative ways as required. Prioritise the use of Aboriginal words in the naming of parks and natural areas in line with Council's Naming our Reserves, Facilities and Roads Policy.	All	Ongoing service	OPB 22/23 & consider in DP & LTFP	CA&C P&R
IU 8	Implement the Coast Walk Public Art Strategic Plan, with diverse public art commissions, wayfinding and pathways, including Aboriginal art and signs.	M, BDW, MV	Short to medium term	Consider in DP & LTFP	CA&C
IU 9	Develop interpretive story telling along the Coast Walk in consultation with First Nations peoples.	M, BDW, MV	Short to medium term	Consider in DP & LTFP	CA&C
IU 10	Develop interpretive story telling at Narrabeen Lagoon in consultation with First Nations peoples.	BDW, MV	Medium term	Consider in DP & LTFP	CA&C P&R
IU 11	Develop a self-guided Aboriginal heritage walk online map for Manly.	M	Short term	Consider OPB 23/24	P&R
IU 12	Develop interpretive story telling signage at the Tower Hill rock shelter to improve education about sites and reduce the likelihood of vandalism.	M	Short term	Consider in DP & LTFP	P&R
IU 13	Update and continue to enhance Council's online walking trail map, including opportunities to promote National Park trails	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
IU 14	Provide walking trail classification signage for key walks, aligned to the Australian Walking Track Classification System as signs are upgraded.	All	Ongoing service	Consider in DP & LTFP	P&R E&CC
IU 15	Develop and implement a revised signage plan for the Manly Warringah War Memorial State Park (Manly Dam).	M	Short term	Consider in DP & LTFP	P&R
IU 16	Provide additional signage with maps at the entrances to key off-road cycling trails in Manly Dam which detail routes, connections, code of conduct, etiquette, skill level and emergency contact details.	All	Short term	OPB 22/23 & consider in DP & LTFP	P&R
IU 17	Install signage on key equestrian trails, including routes, etiquette, skill level, code of conduct signage to inform users.	TH	Short term	Consider in DP & LTFP	P&R
IU 18	Develop and implement a signage plan for Allenby Park, including entry signage and wayfinding.	BDW	Medium term	Consider in DP & LTFP	E&CC

Resourcing acronyms: OPB Operational Plan & Budget, DP Delivery Program, LTFP Long Term Financial Plan.

Timing: Current 22/23, Short 23/24 to 25/26, Medium 26/27 to 31/32, Long 32/33 to 36/37

2. Links and loops

Create a better connected and more accessible open space network, with improved walking and cycling connections.

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
LL 1	Create and enhance regional walking and cycling links aligned with the Sydney Green Grid, particularly:	All	Short to Long Term	See itemised below	T&CI P&R CP
LL 2	Improve the Coast Walk trail between Barrenjoey Headland and Manly Beach, in particular the sections at Whale Beach, Warriewood, between Dee Why and Curl Curl and Newport to Avalon.	MV	Current to Long Term	OPB 22/23 & consider in DP, LTFP	P&R CP
LL 3	Continue to implement the Northern Beaches Walk Plan, including linkages to and between recreation areas.	All	Short to Long Term	Consider in DP & LTFP	TC&I
LL 4	Continue to implement the Northern Beaches Bike Plan.	All	Short to Long Term	Consider in DP & LTFP	TC&I
LL 5	Improve local green/recreational grids and linkages for walking and cycling links between open spaces, town centres, schools, public transport and other key locations and integrate into future plans. Priorities include (see actions below):	All	Short to Long Term	Consider in DP & LTFP	T&CI P&R
LL 6	Continue to work with Transport for NSW regarding ensuring connectivity for residents, pedestrians, cyclists and mountain bikers in the vicinity of the proposed Beaches Link.	M, FF	Short to Long term	Consider in DP & LTFP	P&R
LL 7	Manly Scenic Walkway improvements.	M	Short to Long term	Consider in DP & LTFP	P&R
LL 8	Consider improvements to key access nodes, including: along the Bondi to Manly and Northern Beaches Coast Walk trails; Manly Wharf to Manly Dam; Queenscliff to Manly Dam; Manly Dam to Aquatic Reserve and Frenchs Forest; Manly Dam to Garigal National Park.	All	Short to Long term	Consider in DP & LTFP	TC&I P&R
LL 9	Formalise trail access between Beacon Hill and Narrabeen Lagoon via South Creek to improve active transport and recreational linkages.	BDW	Long term	Consider in DP & LTFP	P&R TC&I
LL 10	Investigate the feasibility of improving public access to foreshores, including around Pittwater waterway and Manly Lagoon as per the Northern Beaches Local Strategic Planning Statement.	MV, M	Short to Medium term	Consider in DP & LTFP	S&PP
LL 11	Improve access to Tea Tree Lookout at Dee Why Headland, off Molong St, to reinstate wheelchair access.	BDW	Short term	Consider in DP & LTFP	P&R
LL 12	Implementation of the recreational trails' renewal program for improved walking and bike trails.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
LL 13	Encourage safe and considerate use of shared trails and pathways through etiquette signage, raising awareness about distractions (e.g. mobile phones), education programs and line marking on shared paths.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	TC&I
LL 14	Provide new, improve existing and connect supporting infrastructure along trails such as innovative car parking solutions, amenities (particularly repurposing and sharing existing facilities), shade, water and seating, trail infrastructure, signage where funding allows.	All	Short to long term	Consider in DP & LTFP	P&R P
LL 15	Consider and implement safety improvements for the Narrabeen Lagoon shared path due to high use, such as trail widening, more signage, trail infrastructure where feasible at pinch points and cross hatching on the pathway.	BDW	Short to medium term	Consider in DP, LTFP	T&CI
LL 16	Investigate and consult and implement if feasible and resources available the construction of a learn to ride path for children south of the kayak hire between Berry and Wheeler Reserves.	BDW	Medium to long term	Consider in DP & LTFP	P&R
LL 17	Ensure the proposed Safe Cycling Network is considered in future parks & reserves Masterplans.	All	Short to long term	Consider in DP & LTFP	P&R TC&I
LL 18	Provide secure bicycle parking at beaches and key recreation spaces e.g. Manly Beach.	M, MV, BDW	Short to long term	Consider in DP & LTFP	TC&I

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
LL 19	Provide bike repair stations at key recreation locations in addition to active travel connections, for example, at Manly Dam mountain bike track, and incorporate into budgets for future bike trail and bike park projects.	All	Short to medium term	Consider in DP & LTFP	P&R T&CI
LL 20	Integrate circuit loops within and/or around larger parks for walking, running and cycling when upgrades and redesign is occurring.	All	Short to long term	Consider in DP & LTFP	P&R
LL 21	Support the actions of the Disability Inclusion Action Plan that considers improvements to the accessibility of Council's open space and outdoor recreation facilities including at beaches ocean and inner waterway (including provision of suitable wheelchairs in agreed locations) rock pools and lagoons such as but not limited to; Investigate how Council could create quiet or safe spaces for people with sensory needs in public spaces, identify more locations to improve access to the natural environment, Improve access to walking tracks and recreational fishing locations and more playgrounds designed for all abilities.	All	Short to long term	Consider in DP & LTFP	P&R CA&C
LL 22	Continue to work with the National Parks and Wildlife Service and other northern Sydney land managers about regional trail opportunities and linkages for mountain biking, bush walking and horse riding.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R E&CC
LL 23	Work with NSW National Parks and Wildlife Service to improve local walking trail entrances and loops which intersect with residential streets, particularly around Frenchs Forest.	FF and all	Short to Medium term	Consider in DP & LTFP	P&R E&CC
LL 24	Implement the findings of the cross country horse trail audit at JJ Melbourne Hills Memorial Reserve in consultation with Forest Hills Pony Club. Develop and implement a signage plan to reduce actual and perceived conflict with various users of the site and to improve safety. Consider realigning the cross country horse trail and/or the criterion track so they do not cross paths, to improve safety for all users.	TH	Current to Short term	OPB 22/23 & consider in DP, LTFP	P&R
LL 25	Improve accessibility from the field archery club car park to the club house at JJ Melbourne Hills Memorial Reserve.	TH	Medium term	Consider in DP & LTFP	P
LL 26	Progressively upgrade the walking trail network at Manly Dam (including surface upgrades and signage) to improve safety, access and the walking experience as well as reducing the environmental impacts including those associated with track erosion.	M	Current to Long Term	OPB 22/23 & consider in DP, LTFP	P&R
LL 27	Develop a boardwalk between sections 2 and 3 at Manly Dam, to improve safety and connectivity adjacent to the foreshore. Consider incorporating interpretive signage, and naming in keeping with the park's purpose as a War Memorial.	M	Current	OPB 22/23	P&R
LL 28	Continue to maintain the Manly Dam mountain bike trail to meet community needs.	M	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
LL 29	Implement priority improvements and upgrades to the Manly Dam mountain bike trail to improve rider safety and rider experience as well as reducing the environmental impacts. To be informed by the 2021 mountain bike trail audit and rider feedback. Initial priority areas include: <ul style="list-style-type: none"> Improvements and minor realignments in the vicinity of Manning St and Bantry Bay Reserve. Improvements and potential minor realignments at the 19th hole. Improvements and potential minor realignments to the fire trail descent off the Trig Track. In consultation with Transport for NSW, consider linkages between the Trig Track and Pipeline Trail in the vicinity of the planned shared path along Wakehurst Parkways as part of the proposed Beaches Link tunnel project, to improve connectivity and provide a safer, easier route for riders to bypass the steep fire trail within Manly Dam. 	M	Current to Medium term	OPB 22/23 & consider in DP & LTFP	P&R

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
LL 30	Liaise with the NSW National Parks and Wildlife Service and Transport for NSW regarding the potential to create/formalise safe linkages between the Manly Dam and Garigal National Park trails on either side of Wakehurst Parkway, including the Possums and Popeye trails. Include consideration of the proposed Beaches Tunnel project	M, FF	Short to Long term	Consider in DP & LTFFP	P&R, T&CI
LL 31	Develop a shared path along the Sydney Water pipeline between Aquatic Reserve and Manly Dam.	M, FF	Short to medium term	Consider in DP & LTFFP	T&CI
LL 32	Investigate feasibility for a multi-use trail linking Condover Reserve to Manly Dam including provision of end of trip facilities at Condover Reserve such as access to car parking.	M	Short to Long term	Consider in DP & LTFFP	P&R E&CC
LL 33	Investigate feasibility for a primary mountain bike trailhead at Aquatic Reserve to provide a key link to Manly Dam and the Garigal National Park mountain bike trails as well as Frenchs Forest precinct and the proposed Beaches Link shared path. Secondary trailheads to include Manly Vale Public School, Nyrang Road, Allambie Heights Oval, Condover Reserve and potentially Seaforth Oval. Trailhead facilities to be considered including: end of trip facilities, signage, links to amenities.	FF, M	Short to Medium term	Consider in DP & LTFFP	P&R
LL 34	Support one trial mountain bike event at Manly Dam, with potential for an annual event.	M	Short term	Consider in DP & LTFFP	P&R
LL 35	Close and rehabilitate the unauthorised mountain bike trail at Manly Dam known to riders as Fatback and other unauthorised trails as they develop.	M	Short to medium term	DP 23/24 & consider in DP & LTFFP	P&R
LL 36	Retain and signpost the unauthorised bike trails Nemesis and Quarry Track (formerly known as Edward) at Manly Dam and incorporate them into a future plan of management as part of the formal mountain bike trail. Nemesis is a realignment for the safety of rider and pedestrians. Edward provides a section of technical single track in an otherwise predominantly intermediate shared trail.	M	Current to medium term	OPB 22/23 & consider in DP & LTFFP	P&R
LL 37	Provide new and improved bike parks across the Northern Beaches to better meet the growing needs of riders. 'Twin' sites may be provided in some areas to cater for progression in skill level. Facilities catering for advanced riders are to be located appropriately near to associated facilities and amenities such as car parking, toilets and water. The bike parks may vary in features and surface from asphalt to dirt depending on the scale and location and need. Community engagement is required, including with neighbouring residents, regarding the design. Roll out of new and improved bike parks depends on availability of resources and funding. Consideration to be made in minimising impact on nearby residents and other use.	All	Short to Long Term	Consider in DP & LTFFP	P&R
LL 38	Provide an intermediate to advanced skill level bike park in the south of the local government area, including adjacent to Seaforth Oval at Seaforth pending securing land tenure and an agreement from the State Government.	M	Short term	Consider in DP & LTFFP	P&R
LL 39	Provide new bike parks or formalise existing bike play areas, including at the following locations:	All	Short to Long term	Consider in DP & LTFFP	P&R
LL 40	Avalon - provide a junior to intermediate bike park. Potential locations include near the skate park being mindful not to unreasonably displace existing uses.	MV	Short to Medium term	Consider in DP & LTFFP	P&R
LL 41	Koorangi Reserve, Eleanor Heights - consider junior to intermediate including dirt jumps, with minor improvements and signage	MV	Short to medium term	Consider in DP & LTFFP	P&R
LL 42	Warriewood, e.g. Potential locations include Boondah Reserve or North Narrabeen Reserve, minor improvement and signage	MV	Short term	Consider in DP & LTFFP	P&R
LL 43	Lionel Watts Reserve, Belrose - consider dirt jumps, minor improvements and signage	FF	Short to Medium term	Consider in DP & LTFFP	P&R

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
LL 44	John Fisher Park, North Curl Curl - consider junior to intermediate including dirt jumps	BDW	Short term	Consider in DP & LTFP	P&R E&CC
LL 45	Careel Bay - consider intermediate	MV	Medium to long term	Consider in DP & LTFP	P&R
LL 46	Trafalgar Reserve, Newport	MV	Medium to long term	Consider in DP & LTFP	P&R
LL 47	Whitney Reserve, Mona Vale - consider junior to intermediate including dirt jumps	MV	Short to medium term	Consider in DP & LTFP	P&R
LL 48	Wyatt Ave, Belrose - junior bike park	FF	Current to Short term	OPB 22/23 & consider in DP & LTFP	P&R
LL 49	Lynne Czinner Reserve, Warriewood - bike park (as part of new open space /park)	MV	Current to short term	OPB 22/23 & consider in DP & LTFP	P&R
LL 50	Investigate and consult over the feasibility of providing a junior bike park/pump track at the northern end of Bilorong Reserve. Footprint to be of a size that minimises impact on other use. If feasible seek funding and resources to implement.	MV	Current to long term	OPB 22/23 & consider in DP & LTFP	P&R
LL 51	Maybrook Avenue Reserve, Cromer	BDW	Current	OPB 22/23	P&R
LL 52	Accommodate the growing needs of mountain biking at JJ Melbourne Hills Memorial Reserve where appropriate, including the following:	TH	Short to Long Term	Consider in DP & LTFP	P&R
LL 53	Pony Express and Guggenheim mountain bike trails within JJ Melbourne Hills Memorial Reserve to be considered authorised following completion of an environmental review and implementation of any necessary improvements. Improvements to be made as resources and funding becomes available including signage. A new trailhead(s) is to be created to minimise conflict with horses and other use.	TH	Current to medium term	OPB 22/23 & consider in DP & LTFP	P&R
LL 54	The following unauthorised mountain bike trails are to be closed, made safe and rehabilitated: Bundy, Bundy Run, Bundy Bear and Skutch Gully. Signage and fencing/barriers required. Any new trails created without prior approval from Council will be closed.	TH	Short to Medium term	Consider in DP & LTFP	P&R
LL 55	Consider the potential for additional mountain bike trails including signage at JJ Melbourne Hills Memorial Reserve to the south of the BMX track, pending environmental review and community consultation.	TH	Current to medium term	OPB 22/23 & consider in DP & LTFP	P&R
LL 56	Consider improved and new storage and club facilities for the BMX Club at JJ Melbourne Hills Memorial Reserve based on need.	TH	Medium to long term	Consider in DP & LTFP	P P&R
LL 57	Undertake the appropriate environmental assessments required to authorise the Mona Vale Downhill mountain bike trail at Ingleside Chase and undertake any mitigation and trails works required by the assessments when resources and funding become available. Close unauthorised trails. Include educational signage about code of conduct to reduce conflict with walkers and to address unauthorised trail development.	MV	Short to long term	Consider in DP & LTFP	P&R E&CC
LL 58	Continue to support volunteer trail maintenance crews, e.g. provision of materials, personal protective equipment, supervision and inductions, at Manly Dam, Bare Creek Bike Park and JJ Melbourne Hills Memorial Reserve and future locations as agreed.	M, TH, FF	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
LL 59	Support additional off-road cycling facilities at the former Belrose Waste and Recycling Centre/Bare Creek Bike Park, including a first-class standard cross-country track, pending availability of resources and funding.	FF	Short to Long term	Consider in DP & LTFP	P&R

Code	Recommended action	Catchment/s	Proposed timing	Proposed resourcing	Responsibility
LL 60	Investigate the feasibility of formalising some mountain bike trails at Deep Creek (known to riders as Mt Narra), North Narrabeen. Conduct an environmental review of the recent trail audit in partnership with National Parks and Wildlife Service and undertake community engagement. Any future formalisation of trails in this area will need to consider environmental sensitivities, other parks users, e.g. walkers and dog walkers, appropriate links to the National Park and Eleanora Heights, safe access, parking and amenities, including the access/connection between the eastern and western sides of the creek.	MV	Current to long term	OPB 22/23 & consider in DP & LTFP	P&R E&CC National Parks and Wildlife Service
LL 61	Daisy Duke and Missys (known to riders as Mistress) trails at Forestville Park are considered authorised mountain bike trails. Improvements including any necessary realignments will be made as resources and funding becomes available.	FF	Short to long term	Consider in DP & LTFP	P&R
LL 62	Unauthorised mountain bike trails in the southern section of Forestville Park are to be rationalised, with some to be closed and others considered for retaining for bikes and/or walkers. The trail known as to riders as Breadcrumbs is for walkers only and is not suitable for shared use given its narrow width. The trail known to riders as Dirty Schnitty can be considered for formalising pending appropriate protection of the Aboriginal shelter in the vicinity. Connections to the car park and Garigal National Park to be created/formalised pending agreement and funding being available, including realignments where necessary. Further feasibility work to be undertaken.	FF	Short to long term	Consider in DP & LTFP	P&R

112 3. Better and brighter

Enhance the use, quality, sustainability and resilience of existing open spaces and associated infrastructure through targeted embellishments and design improvements that are in keeping with the natural environment.

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
BB 1	New and improved open spaces and recreation facilities are to result in no net loss of bushland. Designs are to maximise the retention of bushland, with planned vegetation management and/or replacement where necessary, either on site or within the local government area.	All	Ongoing service	OPB 22/23 & consider annually in DP & LTFP	E&CC P&R
BB 2	Provide inclusive opportunities for our community to enjoy the coast and bushland, by delivering high quality, sustainable, resilient and appropriate facilities and access whilst protecting environmentally and culturally sensitive lands and features.	All	Short to long term	Consider in DP & LTFP	P&R E&CC P T&CI CP
BB 3	As per the Events Strategy, develop and improve open spaces (including planning approvals) to cater for community events ranging from neighbourhood to regional events in agreed locations. Consider for example Village Park, Keirle Park, Dunbar Park, Ivanhoe Park, James Meehan Reserve, Aquatic Reserve, North Narrabeen Reserve and other agreed locations.	All	Short to long term	Consider in DP & LTFP	P&R P&ED
BB 4	Improve boat management and storage on the foreshore of Scotland Island.	MV	Short to Medium term	Consider in DP & LTFP	P&R
BB 5	Create and retain high quality quiet spaces particularly in local parks and integrate into larger parks. Consider locations near schools or town centres with opportunities to connect to the pedestrian and/or public transport network, e.g. Allenby Park, Brookvale, Frenchs Forest, Manly, Dee Why.	All	Short to long term	Consider in DP & LTFP	P&R
BB 6	Support the implementation and monitoring of the proposed Urban Night Sky Place at Palm Beach Headland.	MV	Short term	Consider in DP & LTFP	E&CC P&R
BB 7	Support opportunities for local businesses, including local mobile food and beverage providers, to operate in open spaces to benefit the community.	All	Ongoing service	OPB 22/23 & consider in DP & LTFP	P&R
BB 8	Upgrade/improve the Forest Hills Pony Club Clubhouse at JJ Melbourne Hills Memorial Reserve, including expanded and new accessible public amenities. Consider dark sky lighting to reduce light pollution impacts on astronomy activities. Consider shared use of the amenities with other recreation groups such as the BMX Club and the Northern Sydney Astronomical Society.	TH	Short to medium term	Consider in DP & LTFP	P
BB 9	Ongoing improvements to existing dog off leash areas to meet community needs, to ensure high quality opportunities for off leash dog activities across the Northern Beaches.	All	Ongoing service	Consider in DP & LTFP	P&R
BB 10	Implement priority infrastructure improvements at Manly Warringah War Memorial State Park, including:	M	Ongoing service	Consider in DP & LTFP	P&R
BB 11	Upgrade the amenities buildings in section 3 at Manly Dam.	M	Short term	Consider in DP & LTFP	P
BB 12	Upgrade the amenities buildings in section 4 at Manly Dam.	M	Medium term	Consider in DP & LTFP	P
BB 13	Design and installation of an entrance gateway that acknowledges Manly Dam as a war memorial.	M	Medium to Long Term	Consider in DP & LTFP	P&R
BB 14	Provision of a shelter structure in the vicinity of the war memorial in picnic area 1 with inscriptions for stories of the history of Manly Dam and the Manly Warringah War Memorial Park Remembrance Trust. The shelter structure to be designed to support ANZAC Day and Remembrance day ceremonies including 3 phase power.	M	Short term	Consider in DP & LTFP	P&R
BB 15	Provide safer access to Manly Dam for pedestrians and cyclists (shared path) using the King St entrance including improved access and new signage.	M	Medium to long term	Consider in DP & LTFP	TC&I
BB 16	Continue to implement priorities from the Manly Warringah War Memorial Park Plan of Management (2014) and relevant studies and audits.	M	Current to long term	OPB 22/23 & consider DP, LTFP	P&R

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
BB 17	Continue supporting the establishment and operation of community gardens as per the Community Gardens Policy and Guidelines, including facilitating educational and advisory workshops for garden members and ongoing support for volunteers and annual events	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
BB 18	Continue to support the volunteers assisting with Council gardens, such as Ivanhoe Park Botanic Garden, Stony Range Regional Botanic Garden and the Bible Garden, including annual events.	M, MV, BDY	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
BB 19	Provide shade at agreed locations, favouring natural shade through tree planting, such as at Lakeside Park. Consider providing shade structures at the high use playgrounds and rock pools.	All	Short to long term	Consider in DP & LTFP	P&R
BB 20	Continue to provide multi-use graffiti (aerosol art) walls at appropriate locations.	All	Short to long term	Consider in DP & LTFP	P&R
BB 21	Improvements to Stony Range Botanic Garden, including: BB22, BB23, BB24, BB25, BB26.	BDW	Short to Long term	OPB 22/23 & consider annually DP, LTFP	P&R
BB 22	Water harvesting and related projects.	BDW	Medium term	Consider in DP & LTFP	P&R
BB 23	Upgrade nursery, including improved access.	BDW	Short to Medium term	Consider in DP & LTFP	P&R
BB 24	Consider repurposing the cottage for shared use, environmental and or educational purposes.	BDW	Long term	Consider in DP & LTFP	P&R
BB 25	Investigate the feasibility of an upgrade to the pavilion including a café/refreshment area.	BDW	Long term	Consider in DP & LTFP	P&R
BB 26	Renewable energy source for the pavillion (Corkery Building), e.g solar panels.	BDW	Medium to Long term	Consider in DP & LTFP	P&R
BB 27	Consider the review of sportsground amenities and the opportunities for improved facilities including improved gender equity, female and family friendly best practise for toilet and change facilities.	All	Current to long term	OPB 22/23 & consider DP, LTFP	P
BB 28	Upgrade the amenities at Rowland Reserve, Bayview, and consider feasibility of relocating it.	MV	Current to short term	consider in DP & LTFP	P
BB 29	Upgrade the amenities at Shelley Beach.	M	Current to short term	consider in DP & LTFP	P
BB 30	Build new amenities at Little Manly Point.	M	Current to short term	consider in DP & LTFP	P
BB 31	Upgrade the amenities at West Esplanade as per the West Esplanade Heritage Activation Plan.	M	Short term	Consider in DP & LTFP	P
BB 32	Continue to implement the ongoing reserves renewal program (reserves and parks improvements).	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
BB 33	Continue to implement the foreshores renewal program for foreshore and building improvements.	M, BDW, MV	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R P
BB 34	Continue to implement the rock pool renewal program, including Palm beach rock pool.	M, BDW, MV	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
BB 35	Continue to undertake tidal pool refurbishment, including renewing Paradise beach tidal pool and restoring Bayview Tidal Pool pending an environmental review.	M, MV	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
BB36	Consider improvements to Koobilya Street Reserve based on community feedback received for the upgrade of the Grove bike park in 21/22	M	Short to medium term	Consider in DP & LTFP	P&R
BB37	Consider park infrastructure and programs that encourage community connections, volunteering, learning and re-use such as street libraries, environmental education in suitable locations	All	Short to medium term	Consider in DP & LTFP	P&R
BB38	Enhance efficiency and reduce carbon emissions using latest technology of the appropriate standard including through the installation of solar and LED lights where appropriate for new projects and lighting upgrades.	All	Ongoing	Consider in DP & LTFP	P&R, P

4. Growth and gaps

Provide new and enhanced open space and outdoor recreation facilities, and enable multipurpose use of space, to support residential growth and address key provision gaps.

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
GG 1	Continue to upgrade public open spaces and create green links to support the delivery of the Dee Why Town Centre Master Plan	BDW	Current to Long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 2	Create new open spaces and linkages and embellish existing to support development in the Frenchs Forest Priority Growth Area, i.e. Akora, Rabbett and Brick Pit Reserves	FF	Current to Short term	OPB 22/23 & consider in DP & LTFP	P&R
GG 3	Encourage and enable public use of parks and sportsfields and other locations outside competition hours and in the evening for personal recreation, including through access to lights where appropriate. Also, consider appropriate lighting.	All	Short to Long Term	Consider in DP & LTFP	P&R
GG 4	Consider innovative golf related or compatible activities to increase use of Avalon Golf Course.	MV	Short to medium term	Consider in DP & LTFP	P&R P
GG 5	Continue to seek shared use arrangements with other landholders, such as the Department of Education, schools, and colleges, for the public use of open space and recreational facilities outside of hours. This includes consideration of partnerships for improvements and maintenance	All	Ongoing service	OPB 22/23 & consider annually in DP & LTFP	P&R P CA&C
GG 6	Continue to explore opportunities for shared use of bowling club facilities on Council land as they arise.	All	Short to Long Term	Consider in DP & LTFP	P&R P
GG 7	Investigate options for providing storage and club facilities for groups such as boardriders (at multiple beaches), Warringah Triathlon Club and beach volleyball. Potential for shared spaces.	M, BDW, MV	Short to Long Term	Consider in DP & LTFP	P&R P
GG 8	Explore opportunities to make some parks, open spaces and car parks available for limited camping and/or caravans at peak holiday times.	All	Medium to long term	Consider in DP & LTFP	P&R P T&CI
GG 9	Playground upgrades will focus on providing an equitable distribution of high quality play experiences that benefit a broad range of people, rather than smaller playgrounds that may only service a small catchment. Consideration should be given to the types of play experiences provided and may include facilities suitable for older children and youth, in particularly bike parks and/or basketball facilities.	All	Current to long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 10	New playgrounds to be provided in priority areas when funding becomes available, including: <ul style="list-style-type: none"> • Brick Pit Reserve, Frenchs Forest • Ashley Reserve, Fairlight • Parkes Road, Collaroy Plateau • Fielding Reserve, Collaroy • Condoval Reserve, North Balgowlah (including linking paths and shade) • Investigate the feasibility of providing a local play experience in the Western Avenue/McDonald Street road reserve, North Manly • Consider suitable locations for a playspace in the vicinity of Forestville Park to support nearby residents 	FF, MV, M, BDW	Current to Long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 11	Prioritise playground renewals and upgrades as recommended through annual condition audits, including the following:	All	Ongoing service	OPB 22/23 & consider in DP & LTFP	P&R
GG 12	<ul style="list-style-type: none"> • Forestville War Memorial Park • Little Manly Point Reserve • Griffith Park, Collaroy • Jacka Park, Freshwater, include youth facilities such as basketball court • Trafalgar Park, Newport 	FF, M, MV, BDW	Current to Long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 13	<ul style="list-style-type: none"> • Akora Reserve, Forestville • Rabbett Reserve, Frenchs Forest • Brick Pit Reserve, Frenchs Forest (new playground also listed above) 	FF	Current to short term	OPB 22/23 & consider in DP & LTFP	P&R

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
GG 14	<ul style="list-style-type: none"> Anana Reserve, Elanora Heights Ankali Reserve, North Manly Dee Why Beach Reserve (Michaela Howie) Epworth Park, Elanora Heights Freshwater Beach Goroka Park, Beacon Hill Governor Phillip Park, Palm Beach Gunyah Place Reserve, Avalon Beach JAF Fenwick, Seaforth John Fisher Park Netball, Curl Curl Koorangi, Elanora Heights Lagoon Park, Manly Lillihina Reserve, Cromer Michel Reserve, Cromer North Steyne Major, Manly Patanga Reserve, Frenchs Forest Truman Reserve, Cromer Wedgewood Reserve, Beacon Hill Wentworth Reserve, Belrose Wheeler Park, Narrabeen 	All	Current to medium term	OPB 22/23 & consider in DP & LTFP	P&R
GG 15	<p>Due to the high number of playgrounds in some locations, for example, the Frenchs Forest catchment, as play equipment reaches the end of its useful life consultation with residents will be undertaken regarding the most appropriate future use of the reserves for the community. Future use may include play equipment, youth facilities (e.g. basketball), nature play or passive recreational use, e.g. seating or picnic table.</p> <p>Reserves where play equipment is ageing and future use could be discussed with residents includes (but is not limited to):</p> <ul style="list-style-type: none"> Aranda Reserve, Frenchs Forest Cashel Reserve, Killarney Heights Casuarina Reserve, Frenchs Forest Donegal Reserve, Killarney Heights Merrilee Reserve, Frenchs Forest Orana Reserve, Belrose 	FF and All	Current to Long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 16	<p>Consider relocation of some playgrounds when due for upgrade to address site constraints and provide a better experience. For example:</p> <ul style="list-style-type: none"> Consider installing a new playground at Lyly and Orara Roads, Allambie Heights, to replace the one at Orara Reserve which is on land owned by the Department of Education and Communities. Consider relocating the playground space at Palmgrove Reserve, Avalon Beach, to the larger, flatter, lower section of the park on the opposite side of the road, being mindful of protected vegetation communities. Paloma Reserve playground which is affected by tree roots 	All	Short to long term	Consider in DP & LTFP	P&R
GG 17	<p>Provide new and/or improved basketball facilities at appropriate locations as parks are reviewed for improvement to better meet need. These may vary from quarter courts to full size depending on need, available space and compatibility with other use and users and impact on residents, with consideration of the park hierarchy (e.g. Local or District). Potential locations include:</p> <ul style="list-style-type: none"> Tania Park, Balgowlah Heights Jacka Park, Freshwater Whitney Reserve, Mona Vale Bayview, e.g. Winnererremy Bay or Bayview Reserve Killarney Heights Oval Wyatt Avenue Reserve, Belrose Patanga Park, Frenchs Forest Beach locations e.g. consider Curl Curl, Dee Why, Manly beachfront <p>Consider lighting of some basketball courts at appropriate locations including improving lighting at the LM Graham Reserve court</p> <p>Consider opportunities for shared use of netball courts for basketball e.g. during the off season and when not required for training / competition. Potential locations include:</p> <ul style="list-style-type: none"> Forestville Memorial Playing Fields/Melwood Oval John Fisher Park, North Curl Curl Lionel Watts Reserve, Belrose 	All	Short to Long term	Consider in DP & LTFP	P&R

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
GG 18	Consider shared use (and required improvements) of netball and tennis courts for use for activities such as pickleball. Potential locations include: <ul style="list-style-type: none"> • Koobilya Street Reserve tennis courts, Seaforth • Forestville Memorial Playing Fields courts • Collaroy Plateau Park tennis court • Boondah court complex 		Short to medium term	Consider in DP & LTFP	P&R
GG 19	Implement a prioritised program for installing fitness equipment on appropriate links and loops, and in locations where they will be most frequently used. Locations include: <ul style="list-style-type: none"> • Lionel Watts Reserve, Belrose • Forestville War Memorial Playing Fields • Beverly Job Park, Narrabeena • Manly Beach • Tania Park, Balgowlah Heights • James Meehan Reserve, Dee Why • Middle Creek Reserve, North Narrabeen • Griffith Park, Collaroy • Cromer • Curl Curl Beach • Narrabeen Beach • Passmore Reserve, Manly Vale and Winnererremy Bay, Bayview 	All	Current to long term	OPB 22/23 & consider in DP, LTFP	P&R
GG 20	Integrate multi-use outdoor recreational facilities into masterplans/landscape plans e.g. hand ball, pickle ball, courts, hitting walls, graffiti walls. Improve existing skate/scooter facilities where need is identified.	All	Ongoing service	Consider in DP & LTFP	P&R
GG 21	Consider provision of additional youth facilities in open spaces such as courts, bike play, outdoor table tennis, climbing walls, parkour, treetop adventures and play equipment and experiences for older kids where appropriate e.g. consider installing an outdoor table tennis table at Dunbar Park, Avalon Beach.	All	Short to long term	Consider in DP & LTFP	P&R
GG 22	Consider opportunities for new dog off leash area(s) that meet community needs including in the Frenchs Forest Priority Growth Area to cater for a growing population and increasing dog ownership	FF	Current to long term	OPB 22/23 & consider in DP & LTFP	P&R
GG 23	Continue to support, where appropriate, opportunities for recreational and sporting use of beaches (and foreshores) for activities such as beach volleyball, beach tennis, surfing, boardriders, swimming, carnivals, competitions, surf life saving, triathlon, paddling, fishing and other water and beach activities including for education.	M, MV, BDW	Ongoing service	OPB 22/23 & consider annually in DP & LTFP	P&R
GG 24	Consider an extension to the Jamieson Park building to provide additional storage for the sailing club in consultation with users and implement as agreed and when resources available	BDW	Short to medium term	Consider in DP & LTFP	P&R P
GG 25	Complete the agreed upgrades of Lynne Czinner Park.	MV	Current to short term	OPB 22/23 & consider in DP, LTFP	P&R
GG 26	Support community initiatives for street libraries in Council parks at appropriate locations.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
GG 27	Implement Council's commitments to open space and recreation as outlined in the NSW Government's Frenchs Forest 2041 Place Strategy as agreed.	FF	Medium to long term	Consider in DP & LTFP	P&R

118 5. Management and planning

Ensure management of open spaces, including planning, policies, processes and events, are equitable, flexible, responsive and viable.

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
MP 1	Undertake an Indoor Sport and Recreation Needs Study to better understand current participation rates, gaps and needs and to provide strategic directions.	All	Current to short term	OPB 22/23 & consider in DP, LTFP	P&R P CA&C
MP 2	Efficient, cost-effective, and sustainable asset management of Northern Beaches recreational facilities and open spaces, as per Council's Asset Management Plans.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R P
MP 3	Develop a commercial use policy for open spaces including beaches.	BDW, MV, M	Short term	Consider in DP, LTFP	P&R
MP 4	Develop a consolidated Dogs in Public Places Policy (Dog Policy) in consultation with the community to guide the management of dogs in open spaces and to identify opportunities to improve the provision of quality spaces for people to enjoy time outdoors with their dogs.	All	Current to short term	OPB 22/23	P&R EC
MP 5	Maintain and implement a prioritised rolling program for preparing, consolidating and renewing plans of management (and related strategic documents) for open space, aligned to need and organisational capacity.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R E&CC
MP 6	Develop masterplans, landscape plans and plans of management for priority parks and open spaces and implement as agreed and where resources are made available, for example North Narrabeen Reserve, Seaforth Oval and Deep Creek.	All	Ongoing service	OPB 22/23 & consider annually DP, LTFP	P&R
MP 7	Implement priority improvements identified in the Ivanhoe Park including Manly Oval Plan of Management and Masterplan as funds and resources become available.	M	Current to Long term	OPB 22/23 & consider in DP, LTFP	P&R
MP 8	Develop a Generic Sportsground Plan of Management	All	Short term	Consider in DP, LTFP	P&R
MP 9	Develop a consolidated Generic Parks Plan of Management.	All	Short term	Consider in DP, LTFP	P&R
MP 10	Develop a consolidated Generic Bushlands Plan of Management that supports sustainable recreational use.	All	Medium term	Consider in DP, LTFP	E&CC
MP 11	Implement Freshwater Coastal Open Space Masterplan.	BDW	Current to medium term	OPB 22/23 & consider in DP & LTFP	P&R
MP 12	Implement the Clontarf Masterplan	M	Current to short term	OPB 22/23 & consider in DP, LTFP	P&R
MP 13	Implementation of the Little Manly Beach Masterplan	M	Current to short term	OPB 22/23 & consider in DP, LTFP	P&R
MP 14	Develop a new masterplan for Governor Phillip Park, Palm Beach and implement as agreed when resources and funding are made available	MV	Short to medium term	Consider in DP & LTFP	P&R
MP 15	Implement the West Esplanade Activation Plan improvements.	M	Short to medium term	Consider in DP & LTFP	P&R P
MP 16	Complete and implement the agreed landscape plan for Catherine Park, Scotland Island, based on community needs.	MV	Short to medium term	Consider in DP & LTFP	P&R
MP 17	Develop and implement a recreation plan for JJ Melbourne Hills Memorial Reserve to better accommodate and manage the varied recreational activities more effectively. The Masterplan is to consider the shared uses and specific and unique needs of horses, field archery, bikes, astronomy and general community use and access. Specific needs are listed elsewhere in this Action Plan.	M	Short to long term	Consider in DP & LTFP	P&R
MP 18	Develop and implement a landscape plan for Aquatic Reserve, Frenchs Forest, that identifies among other things: improvements to the baseball fields and facilities; improvements to reserve access and linkages; potential expansion of the skate area with a direct link to the pipeline trail; potential for basketball; needs to make the reserve event ready, e.g. for markets, council events; a mountain bike trail head; site signage; and additional tree planting and general environmental improvements.	FF	Short to long term	Consider in DP & LTFP	P&R

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
MP 19	Investigate recreational opportunities at Addiscombe Road Reserve, Manly Vale, adjacent Manly Creek that aligns with the environmental management plan. Consider opportunities for bike use in this plan.	M	Medium to long term	Consider in DP & LTFF	P&R
MP 20	Develop a landscape plan for Beverly Job Park, Narraweena, as a higher quality multi-purpose park, considering improvements to the dog off leash area and potential for youth facilities such as basketball multipurpose court and community garden. Not to impact on existing sport and dog off-leash areas.	BDW	Medium to long term	Consider in DP & LTFF	P&R
MP 21	Undertake community engagement and implement environmental and recreational use improvements for the Crown land on Little Willandra Road, Cromer (Lot 856 DP 752038), for which Council was appointed Crown land manager on 16 July 2021.	BDW	Current to medium term	OPB 22/23 & consider in DP, LTFF	P&R E&CC
MP 22	Continue to work with the State Government regarding recreation, sporting, community and environmental improvements to Nandi Reserve at Frenchs Forest and County Road Reserve at Belrose.	FF	Current	OPB 22/23	P&R
MP 23	Manage and/or remove unauthorised and unsafe works in Council managed parks and bushland, for example, unauthorised bike jumps and trails.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFF	P&R E&CC
MP 24	Continue to work with Transport for NSW regarding the future sporting, recreation and community use of Balgowlah Park and adjacent open space related to the proposed Beaches Link project.	All	Short to Long term	Consider in DP & LTFF	P&R
MP 25	Update the Most Scenic Streets Register and expand it as needed.	All	Short to Medium term	Consider in DP & LTFF	P&R T&CI
MP 26	Conduct accessibility audits as required for key sites/assets and consider when developing Masterplans.	All	Ongoing service	Consider in DP & LTFF	P&R
MP 27	Inclusive, female and family friendly, accessible and universal design of Council capital projects as per strategic direction and Asset Management Plans.	All	Ongoing service	Consider in DP & LTFF	CP P P&R
MP 28	Prepare/update leases and licences and other agreements for regular user groups at JJ Melbourne Hills Memorial Reserve as required, for Warringah Field Archers, Forest Hills Pony Club, Manly Warringah BMX Club and Northern Sydney Astronomical Society and other users as required.	TH	Current to short term	OPB 22/23 & consider in DP, LTFF	P P&R
MP 29	Develop a Tennis Strategy which considers current and future needs and a preferred viable model or models (for Council the clubs and operators) for the integrated management of tennis facilities on the Northern Beaches and facilitate as leases and agreements are renewed. Also consider the needs of other outdoor court sports.	All	Short to medium term	Consider in DP & LTFF	P P&R
MP 30	Investigate the feasibility of expanding/improving the provision of tennis facilities across the Northern Beaches based on identified needs. Consider opportunities in areas/clubs experiencing growth, such as Narraweena and Collaroy. Implement as agreed and where resources are available.	All	Short to medium term	Consider in DP & LTFF	P&R P
MP 31	Review and manage permanent and temporary alcohol prohibited zones.	All	Ongoing service	OPB 22/23 & consider in DP, LTFF	P&R
MP 32	Conduct and implement outcomes of the review of alcohol restricted zoning in partnership with Police, Liquor and Gaming NSW and Northern Beaches Liquor Accord. Update/install relevant signage as required.	All	Current to Short term	OPB 22/23 & consider in DP, LTFF	CA&C
MP 33	Improve actual and perceived safety for the community through design, development and management of public spaces, for example at Ivanhoe Park/Manly Oval.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFF	P&R CA&C
MP 34	Identify and implement best practice approaches in order to manage high risk open space locations on the Northern Beaches, e.g. suicide hotspots.	M, MV, BDW	Ongoing service	OPB 22/23 & consider annually in DP, LTFF	P&R CA&C

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
MP 35	Establish a 'hot spot' response capacity that supports timely crime preventions at emerging locations, including open spaces, in partnership with Police.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	CA&C P&R
MP 36	Investigate and implement improvements to responses to identified open space locations of crime and safety concerns as agreed.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	CA&C P&R
MP 37	Continue to implement the Rapid Graffiti Removal Program and the use of public art to discourage and improve the community's feeling of safety in open spaces.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	WM&C CA&C
MP 38	Consider a 'good-neighbour' approach to developing and managing recreation in open spaces near property boundaries.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 39	Council will consult with the community regarding new facilities and changes to existing facilities and open spaces as per Council's Community Engagement Framework and Matrix. Targeted stakeholders for certain projects may include, for example, people living with disability, females, youth, children and resident and special interest groups.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 40	Continue to work with the Aboriginal Heritage Office to ensure the protection of Aboriginal heritage within close proximity to open spaces and recreation facilities.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 41	Continue to incorporate climate change risk into Council's asset and enterprise risk management systems as well as during design and delivery of new open spaces and facilities.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R P E&CC T&CI
MP 42	Continue to seek grants for undertaking priority works, projects in open spaces and for facilities.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R E&CC
MP 43	Develop a Memorandum of Understanding with the Sydney Paragliding and Hang Gliding Club (SPHGC) for use of agreed sites.	BDW, MV	Short term	Consider in DP & LTFP	P&R
MP 44	Continue to work alongside and support Surf Life Saving Clubs regarding lifesaving patrols, events and activities and continue to partner with clubs to meet identified needs.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 45	Continue to provide an integrated open space and sports facility booking and management service	All	Ongoing service	OPB 22/23 & consider in DP, LTFP	P&R
MP 46	Continue to implement the new online booking system	All	Current to short term	OPB 22/23 & consider in DP, LTFP	P&R
MP 47	Continue to manage the use of open spaces (including beaches) in a manner that is equitable, consistent and transparent and that balances the demands for access with identified community need, impacts on users, type of use, residents, the environment and community benefits and outcomes	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 48	Continue to provide an integrated recreation planning service for Council's open spaces and sport and recreation facilities	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
MP 49	West Esplanade boardwalk reinstatement - as per Council resolution 404/19, following a determination on the aquarium site commence a detailed feasibility study for the boardwalk/harbour pool reinstatement concept.	All	Long term	Consider in DP & LTFP	P&R

6. Ongoing maintenance

Maintain open space to maximise opportunities for users to access high quality spaces and facilities.

Code	Recommended Action	Catchment/s	Proposed Timing	Proposed Resourcing	Responsibility
OM 1	Continue to implement maintenance regimes for all open spaces, gardens, trails, beaches and rock pools that meet community expectations and needs. Including:	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
OM 2	Continue to improve the provision and cleanliness of public amenities, particularly during high use such as summer, public and school holidays and in popular locations.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P
OM 3	Continue to implement the mowing program and consider potential increases to service levels in high priority locations to meeting community needs particularly in local parks.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
OM 4	Continue to implement the rock pool cleaning program, such as weekly cleans through summer and fortnightly cleans through winter.	M, BDW, MV	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R
OM 5	Continue to maintain, renew and consider upgrades to recreational trails for walking and bike riding.	All	Ongoing service	OPB 22/23 & consider in DP, LTFP	P&R E&CC
OM 6	Continue to maintain beach cleanliness through regular beach raking and cleaning of paving and furniture.	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R WM&C
OM 7	Undertake as required protective works for the Aboriginal shelter in Tower Park, Manly e.g. physical barrier and signage.	M	Short term	Consider for DP, LTFP	P&R
OM 8	Open spaces to be maintained in a manner that is sympathetic to its context, in particular with reference to natural settings	All	Ongoing service	OPB 22/23 & consider annually in DP, LTFP	P&R

6.0 References

References - strategies, policies, guidelines review

Department of Planning, Industry and Environment, Everyone Can Play Guidelines 2019
 Government Architect NSW Draft Bushland and Waterways Guide 2018
 Government Architect NSW Draft Open Space for Recreation 2018
 Greater Sydney Commission The North District Plan 2018
 Planning, Industry and Environment Everyone Can Play Guideline 2019
 Northern Beaches Council Asset Management Plans
 Northern Beaches Council Draft Social Infrastructure Study
 Northern Beaches Council South Playgrounds & Playspaces Strategy 2015 - 2025
 Manly Council Unstructured Recreation Policy 2012
 Pittwater Council Draft Playground Strategy 2016 - 2030
 Pittwater Council Public Space and Recreation Strategy 2014
 A Spirit of Play: Warringah's Open Space Strategy 2015
 Northern Beaches Council Plans of Management - various
 Northern Beaches Council Masterplans - various
 Northern Beaches Community Strategic Plan 2040
 Northern Beaches Council Social Infrastructure Study Issues and Opportunities Background Paper 2019
 Northern Beaches Council Sportsgrounds Strategy 2017
 Northern Beaches Council Towards 2040: Local Strategic Planning Statement 2020
 Northern Beaches Council Destination Management Plan 2021
 Northern Beaches Council Transport Strategy 2038
 Northern Beaches Council Walking Plan 2019
 Northern Beaches Council Bike Plan 2020
 Northern Beaches Council Better Together Social Sustainability Strategy 2040
 Northern Beaches Council Northern Beaches Resilience Strategy - Withstand. Adapt. Thrive 2022
 Northern Beaches Council Protect. Create. Live Northern Beaches Environment and Climate Change Strategy 2040

References - benchmarking councils

Blacktown City Council, Recreation and Open Space Strategy 2018
 City of Sydney, Open Space, Sports and Recreation Needs Study, 2016
 City of Parramatta Community Infrastructure Strategy - Parks and Outdoor Recreation Network, 2019
 City of Parramatta Community Infrastructure Strategy - Sportsground Network, 2019
 Georges River Council, Open Space, Recreation and Community Facilities Strategy 2019-2036
 Inner West Council, Recreation Needs Study, 2018

References - literature review

- Armson, D., et al. (2012). "The effect of tree shade and grass on surface and globe temperatures in an urban area." *Urban Forestry & Urban Greening* 11(3): 245-255.
- Astell-Burt, T., et al. (2014). "Do low-income neighbourhoods have the least green space? A cross-sectional study of Australia's most populous cities." *BMC Public Health* 14(1): 1.
- Astell-Burt, T., et al. (2014). "The association between green space and mental health varies across the lifecourse. A longitudinal study." *Journal of Epidemiology and Community Health* 68(6): 578-583.
- Badland, H., et al. (2014). "Urban liveability: emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health." *Social Science & Medicine* 111: 64-73.
- Barton, J. and J. Pretty (2010). "What is the best dose of nature and green exercise for improving mental health? A multi-study analysis." *Environmental Science & Technology* 44(10): 3947-3955.
- Berman, M. G., et al. (2012). "Interacting with nature improves cognition and affect for individuals with depression." *Journal of Affective Disorders* 140(3): 300-305.
- Bodin, M. and T. Hartig (2003). "Does the outdoor environment matter for psychological restoration gained through running?" *Psychology of Sport and Exercise* 4(2): 141-153. 41
- Bowler, D. E., et al. (2010). "A systematic review of evidence for the added benefits to health of exposure to natural environments." *BMC Public Health* 10: 456.
- Dadvand, P., et al. (2015). "Green spaces and cognitive development in primary schoolchildren." *Proceeds Natural Academy of Science U S A* 112(26): 7937-7942
- Davern, M., Farrar, A., Kendal, D. & Giles-Corti, B. (2016). *Quality Green Public Open Space Supporting Health, Wellbeing and Biodiversity: A Literature Review*. Report prepared for the Heart Foundation, SA Health, Department of Environment, Water and Natural Resources, Office for Recreation and Sport, and Local Government Association (SA). University of Melbourne: Victoria.
- Derkzen, M. L., et al. (2015). "REVIEW: Quantifying urban ecosystem services based on high-resolution data of urban green space: an assessment for Rotterdam, the Netherlands." *Journal of Applied Ecology* 52(4): 1020-1032.
- Giles-Corti, B., et al. (2009). "Encouraging walking for transport and physical activity in children and adolescents." *Sports Medicine* 39(12): 995-1009.
- Giles-Corti, B., et al. (2012). "Increasing density in Australia: Maximising the health benefits and minimising harm." Melbourne, Report to The National Heart Foundation of Australia.
- Giles-Corti, B., et al. (2005). "Increasing walking: how important is distance to, attractiveness, and size of public open space?" *American Journal Preventative Medicine* 28(2 Suppl 2): 169-176.
- Grahn, P. and U. K. Stigsdotter (2010). "The relation between perceived sensory dimensions of urban green space and stress restoration." *Landscape and Urban Planning* 94(3-4): 264-275.
- Kahn, P. H., et al. (2008). "A plasma display window?-The shifting baseline problem in a technologically mediated natural world." *Journal of Environmental Psychology* 28(2): 192-199.
- Kearney, A. R. (2006). "Residential Development Patterns and Neighborhood Satisfaction: Impacts of Density and Nearby Nature." *Environment and Behavior* 38(1): 112-139.



References

- Kuo, F. E. and W. C. Sullivan (2001). "Environment and crime in the inner city does vegetation reduce crime?" *Environment and Behavior* 33(3): 343-367.
- Janssen, I. and A. G. LeBlanc (2010). "Systematic review of the health benefits of physical activity and fitness in school-aged children and youth." *International Journal of Behavioral Nutrition and Physical Activity* 7(1): 1.
- Marselle, M. R., et al. (2013). "Walking for well-being: are group walks in certain types of natural environments better for well-being than group walks in urban environments?" *International Journal of Environmental Research and Public Health* 10(11): 5603-5628.
- McCaffrey, R., et al. (2010). "Garden walking for depression: a research report." *Holistic Nursing Practice* 24(5): 252-259.
- McMorris, O., et al. (2015). "Urban greenness and physical activity in a national survey of Canadians." *Environmental Research* 137: 94-100.
- Oliveira, S., et al. (2011). "The cooling effect of green spaces as a contribution to the mitigation of urban heat: A case study in Lisbon." *Building and Environment* 46(11): 2186-2194.
- Roe, J. J., et al. (2013). "Green space and stress: evidence from cortisol measures in deprived urban communities." *Int J Environ Res Public Health* 10(9): 4086-4103.
- Sugiyama, T., et al. (2008). "Associations of neighbourhood greenness with physical and mental health: do walking, social coherence and local social interaction explain the relationships?" *Journal of Epidemiology and Community Health* 62(5): e9-e9.
- Sugiyama, T., et al. (2015). "Quality of Public Open Spaces and Recreational Walking" *AM J Public Health* 105(12): 2490-2495.
- Thompson, C. W., et al. (2012). "More green space is linked to less stress in deprived communities: Evidence from salivary cortisol patterns." *Landscape and Urban Planning* 105(3): 221-229.
- Van den Berg, M., et al. (2016). "Visiting green space is associated with mental health and vitality: A cross-sectional study in four european cities." *Health Place* 38: 8-15.
- Villanueva, K., et al. (2015). "Developing indicators of public open space to promote health and wellbeing in communities." *Applied Geography* 57: 112-119.
- Ward, J. et al. (2016). "The impact of children's exposure to greenspace on physical activity, cognitive development, emotional wellbeing, and ability to appraise risk". *Health & Place* 40: 44-50.
- White, M. P., et al. (2013). "Would you be happier living in a greener urban area? A fixed-effects analysis of panel data." *Psychol Sci* 24(6): 920-928.
- Wolf, K. L. and A. S. Robbins (2015). "Metro nature, environmental health, and economic value." *Environ Health Perspect* 123(5): 390-398.

Appendix 1 - List of parks and open spaces

Park lists

The following list includes Council owned and managed parks, reserves and natural areas, however, some smaller drainage reserves, road reserves and easements may not appear here. Council data is constantly being updated and this list is based on the best available data at the time.

Name	Park Hierarchy	Name	Park Hierarchy
Mona Vale Planning Catchment		South Bilgola Headland / Newport Headland	District
Bilarong Reserve	Regional	South Mona Vale Headland	District
Governor Phillip Park	Regional	Taylor's Point Reserve	District
Palm Beach Reserve	Regional	The Terraces - Little Head	District
Apex Park	District	Turrimetta Headland Reserve	District
Avalon Beach Reserve	District	Turrimetta Headland Reserve	District
Bangalley Headland Reserve	District	Village Park	District
Bert Payne Reserve	District	Warriewood Beach Reserve	District
Betty Morrison/Bungn Head Reserve	District	Warriewood Wetlands	District
Bilgola Beach Reserve	District	Whale Beach Reserve	District
Bungan Head Reserve	District	Winnererremy Bay Park	District
Careel Headland Reserve	District	Forest Road Road Reserve	Local
Clareville Beach	District	1 Honeyeater Grove Warriewood	Local
Currawong Jetty Reserve	District	10 Therry St Avalon Beach	Local
Dearin Reserve	District	11 Palmgrove Road	Local
Deep Creek Reserve	District	1570 Pittwater Rd Mona Vale	Local
Deep Creek Reserve	District	15a Calvert Pde, Newport	Local
Dunbar Park	District	268 Garden St Warriewood	Local
Lake Park Oval	District	38a Palmgrove Rd Avalon Beach	Local
Lake Park Reserve	District	39a Dress Circle Rd Avalon Beach	Local
Little Head - Headland	District	53 Cabbage Tree Road	Local
Little Head Reserve - Cliff Line	District	6a Mitchell Rd Pal Beach	Local
Mccarrs Creek Reserve	District	70a Samuel Street	Local
Mona Vale Beach Reserve (Robert Dunn Reserve)	District	93a Macpherson St Warriewood	Local
Mona Vale Bowling Club	District	93b Macpherson St Warriewood	Local
Newport Beach Reserve	District	95a Pacific Rd Palm Beach	Local
North Avalon Headland Reserve	District	95b Pacific Rd Palm Beach	Local
North Mona Vale Headland Reserve	District	Aj Small Lookout	Local
North Narrabeen Headland Reserve	District	Algona Reserve	Local
North Narrabeen Reserve	District	Alleyne Avenue Reserve	Local
Pittwater Park	District	Allington Reserve	Local

Name	Park Hierarchy
Amelia Reserve	Local
Anana Reserve	Local
Angophora Reserve	Local
Annam Road Reserve	Local
Annie Wyatt Reserve	Local
Attunga Reserve	Local
Avalon Community Gardens	Local
Baayview Baths	Local
Bangalow Reserve	Local
Barbara Court Reserve	Local
Basin Beach Reserve	Local
Bayview Reserve	Local
Beaconsfield Street Reserve	Local
Beeby Park	Local
Betsy Wallis Reserve	Local
Bilgola Bends	Local
Billarong Park	Local
Bimbimbie Place Reserve	Local
Boondah Reserve	Local
Boondah Reserve	Local
Boondah Reserve East (Inc Narrabeen Creek)	Local
Bothams Beach (McCarrs Creek Foreshore Reserve)	Local
Brinawa Street Reserve	Local
Brindisi Reserve	Local
Briony Reserve	Local
Browns Bay	Local
Browns Bay Reserve	Local
Buena Vista Reserve	Local
Bush To Bay	Local
Bushfire Brigade Station Lovett Bay	Local
Bushrangers Hill Reserve	Local
Cannes Reserve	Local
Careel Bay	Local
Careel Bay Crescent Reserve	Local
Careel Bay Foreshore Reserve	Local

Name	Park Hierarchy
Careel Bay Playing Fields	Local
Carpenter Crescent Reserve	Local
Catalpa Reserve	Local
Catherine Park	Local
Chatten Reserve	Local
Cheryl Crescent Reserve	Local
Church Point Reserve	Local
Cooleena Reserve	Local
Coral Reserve	Local
Coronation Reserve	Local
Crescent Road Reserve	Local
Crown Of Newport Reserve (Inc. Howell Close Reserve)	Local
Currawong Avenue Reserve	Local
Dark Gully Reserve	Local
Deep Creek Foreshore Reserve	Local
Des Creagh Reserve	Local
Dolphin Park	Local
Dress Circle Road Reserve	Local
East McCarrs Creek Reserve	Local
Edwin Ward Reserve	Local
Elanora Road Reserve	Local
Elenora Park Tennis Club	Local
Elgata Close Reserve	Local
Elizabeth Park	Local
Elvina And Lovett Bay (South) Reserves	Local
Elvina And Lovett Bay Reserves	Local
Elvina And Lovett Bay Reserves 42a Sturdee Lane	Local
Elvina Bay North Wharf Reserve	Local
Elvina Bay North Wharf Reserve 72 Sturdee Lane	Local
Elwyn Reserve	Local
Epworth Park	Local
Eungai Place Reserve	Local
Fabian Place Reserve	Local

Name	Park Hierarchy
Fern Creek Park/Lynne Czinner Reserve	Local
Floods Peninsula Reserve	Local
Florence Park	Local
Frog Hollow Reserve	Local
Goodwin Street Reserve	Local
Great Mackerel Beach Reserve	Local
Gretel Park	Local
Griffin Park	Local
Gunyah Place Reserve	Local
Halls Wharf 5a Bona Crescent	Local
Harold Reserve	Local
Hewit Park And Hamilton Reserve	Local
Hilltop Road Reserve	Local
Hilltop To Hudson Walkway	Local
Hitchcock Park	Local
Horden Park	Local
Iluka Park	Local
Ilya Avenue Reserve	Local
Ingleside Chase Reserve	Local
Irrawong Reserve	Local
Jamieson Park	Local
Kamilaroi Park	Local
Kanimbla Reserve	Local
Kariboo Close Reserve	Local
Katoa Reserve	Local
Katrina Reserve	Local
Kennedy Park	Local
Kennedy Place Reserve	Local
Kia Reserve	Local
Kitchener Park	Local
Koala Place Reserve	Local
Koorangi Reserve	Local
Kooroowall Reserve	Local
Kristine Reserve	Local
Kundibah Reserve	Local
Kywong Reserve	Local

Name	Park Hierarchy
Lake Park Oval	Local
Leahvera Reserve	Local
Little Head	Local
Loquat Valley Reserve	Local
Lovett & Towlers Bay Reserves 61-75 Bona Crescent Lovett Bay	Local
Lovett Bay (North) And Towlers Bay 31 Portions Lovett Bay	Local
Lovett Bay (North) And Towlers Bay 64 Bona Crescent Lovett Bay	Local
Lovett Bay Wharf 10 The Chase Lovett Bay	Local
Lucinda Park	Local
Mackerel Beach Wharf	Local
Mackerel Reserve - Diggers Crescent	Local
Malo Reserve	Local
Marie Crescent Reserve	Local
Maybanke Reserve	Local
Mckay Reserve	Local
Minkara Reserve	Local
Minmai Reserve	Local
Mona Vale Bowling Club	Local
Morella Reserve	Local
Moriac Reserve	Local
Morning Bay Reserve	Local
Morning Bay Reserve 8-10 Bona Crescent Morning Bay	Local
Nareen Parade Reserve	Local
Nareen Wetlands	Local
Narroy Park	Local
Newport Heights/Lower Plateau Reserve	Local
Newport Oval	Local
Norma Reserve	Local
Old Wharf Reserve	Local
Palm Grove Park	Local
Paradise Beach Reserve	Local
Paradise Beach Wharf	Local

Name	Park Hierarchy
Pat Hynes Reserve	Local
Pathilda Reserve	Local
Pavich Reserve	Local
Peita Reserve	Local
Pindari Reserve	Local
Pioneers Park	Local
Plateau Park	Local
Porter Hall	Local
Porter Reserve	Local
Porter Reserve	Local
Progress Park	Local
Public Reserve 6 Mahogany Boulevard	Local
Quarter Sessions Road Reserve	Local
Refuge Cove Reserve	Local
Regatta Reserve	Local
Reserve 57 & 58 Coasters Retreat	Local
Reserves Of Lovett Bay (North) And Towlers Bay 1a The Chase Lovett Bay	Local
Reserves Of Lovett Bay (North) And Towlers Bay 22- 24 Portions Lovett Bay	Local
Riddle Reserve	Local
Rocket Park	Local
Rocky Point Reserve 1a Sturdee Lane	Local
Rocky Point Reserve 1b Sturdee Lane	Local
Rostrevor Reserve	Local
Rowland Reserve	Local
Salt Pan Cove Reserve	Local
Sandy Beach Reserve	Local
Sandy Point Beach Reserve	Local
Shearwater Reserve	Local
Snapperman Beach Reserve	Local
South Avalon / North Bilgola Headland	Local
Spurway Park	Local
Stapleton Park	Local

Name	Park Hierarchy
Sunrise Reserve	Local
Tatiara Reserve	Local
The Pinnacle Reserve	Local
The Terraces	Local
Thomas Stephens Reserve	Local
Thyra Reserve	Local
Toongari Reserve	Local
Trafalgar Park	Local
Valley View Reserve	Local
Ventura Reserve	Local
Vesper Reserve	Local
Warriewood Sports Ground	Local
Warruga Place Reserve	Local
Weetawaa Road Reserve	Local
Whitney Reserve	Local
Wiltshire Park	Local
Wimbledon Reserve	Local
Winji Jimmi Reserve	Local
Wirringulla Park	Local
Wirringulla Reserve	Local
Woodlands Reserve	Local
Woolcott Reserve	Local
Woorak Road Reserve	Local
Woorarra Lookout Reserve	Local
Yachtsman Paradise Reserve	Local
Yachtsmans Paradise Wharf	Local
Manly Planning Catchment	
East Espl Pt West Espl Parks	Regional
Esplanade Park	Regional
Manly Beach	Regional
Manly Warringah War Memorial Park	Regional
North Steyne	Regional
Queenscliff Beach	Regional
Shelly Beach Reserve	Regional
South Steyne	Regional
Clontarf Reserve	District

Name	Park Hierarchy
Little Manly Reserve	District
Aquatic Reserve	District
Balgowlah Park	District
Bareena Park	District
Beatrice Street	District
Clontarf Reserve	District
Fisher Bay	District
Forty Baskets Beach	District
Gilbert Park	District
Ivanhoe Park	District
Lagoon Park	District
Little Manly Reserve	District
Lm Graham Reserve	District
Miller/David Thomas	District
Sandy Bay	District
Tania Park	District
Wellings Reserve	District
25 Allambie Rd To Goondarie Rd	Local
27 Southern Cross Wy To Manly Warringah War Memorial Park	Local
4-8 Innes Road, Manly Vale	Local
5 Lyly Rd To Orara Rd	Local
Abingdon Street Reserve	Local
Addiscombe Road Reserve	Local
Adelaide Street Pathway	Local
Adrian Place Road Widening	Local
Alan Avenue Pathway	Local
Allambie Heights Oval	Local
Allambie Heights Oval	Local
Allambie Heights Tennis Club	Local
Allambie Road Reserve	Local
Allambie Road Reserve (No 1)	Local
Arnhem Reserve	Local
Ashley	Local
Balgowlah Bowling Club	Local
Bangaroo Street Reserve	Local
Bantry Reserve	Local

Name	Park Hierarchy
Bantry Reserve	Local
Bate Avenue Reserve	Local
Beatrice St Road Reserve	Local
Benelong Street	Local
Bligh Park	Local
Bower Reserve	Local
Brimbecomb Park	Local
Bundanoon Lane Pathway	Local
Burnt Bridge Creek Reserve	Local
Canea Reserve	Local
Castle Circuit Accessway	Local
Castle Circuit Reserve	Local
Condover Street Reserve	Local
Condover Street Reserve	Local
Cross Street Reserve	Local
Cutler Road Reserves	Local
Dalwood Avenue Reserve	Local
Derna Crescent Reserve (Part Of Allenby Park)	Local
Drainage Reserve	Local
Earnest Stree Road Widening	Local
Edgecliffe Esplanade	Local
Eileen Street Reserve	Local
Ellery Punt Reserve	Local
F.j.machon Reserve	Local
Fairway Reserve	Local
Fisher Street Pathway	Local
Geddes Street Reserve	Local
Gilai Reserve	Local
Glenside Street Reserve	Local
Gordon Street	Local
Grandview Grove Drainage Reserve	Local
Gumbooya Reserve	Local
Gurney Cresent Reserve	Local
Heathcliff Cresent Reserve	Local
Heaton Avenue Reserve	Local
Highview Reserve	Local

Name	Park Hierarchy
Hilltop Crescent Reserve	Local
Hope Street Reserve	Local
J.a.f Fenwick Park	Local
Jackson Street	Local
Kangaroo Park	Local
Keirle Park	Local
Kempbridge Avenue Reserve	Local
Kentwell Road Reserve	Local
King Avenue Drainage Reserve	Local
King Street Reserve (N0 1)	Local
King Street Reserve (N0 2)	Local
Koobilya Street Reserve	Local
Koobilya Street Reserve	Local
Lae Reserve	Local
Lauderdale Avenue Accessway	Local
Laura Street Reserve	Local
Learmonth Avenue Pathway	Local
Lone Pine Reserve	Local
Lot 1490/ Wandella Road	Local
Madison Way Reserve	Local
Manly Peace Park	Local
Manly West Park	Local
Marlee Street Reserve	Local
Maroa Reserve	Local
Monash Crescent Corner Splay	Local
Monsera Ave Reserve	Local
Mulgowrie Crescent Reserves	Local
Nanbarree Reserve	Local
Near Collins Beach	Local
New Street Road Reserve	Local
Nolan Place Reserve	Local
North Balgowlah Tennis Club	Local
North Harbour Reserve	Local
Orara Reserve	Local
Peronne Avenue Pathway	Local
Pickering Point Reserve	Local
Rignold Street Foreshore Reserve	Local

Name	Park Hierarchy
Road Reserve On Brisbane St	Local
Ross Street Reserve	Local
Sandra Place Accessway	Local
Sangrado Park	Local
Seaforth Crescent Reserve	Local
Seaforth Oval	Local
Swaine Reserve	Local
Tania Park	Local
Tower Hill Park	Local
Unknown	Local
Unknown	Local
Wandella Reserve	Local
Wanganella Street Reserve	Local
Weeks Road Road Reserve	Local
Weeroona Park	Local
Winsome Reserve And R.o.w.	Local
Woodbine Reserve	Local
Woodland Street Reserve	Local
Woolgoolga Reserve	Local
Yamba Reserve	Local
Frenchs Forest Planning Catchment	
Forestville Park	District
Belrose Oval	District
Forestville Playing Fields	District
Frenchs Forest Showground	District
Lionel Watts Reserve	District
Oxford Falls Peace Park	District
21 Balleyshannon Rd To Downpatrick Road Reserve	Local
Akora Reserve	Local
Allworth Reserve	Local
Andove Street Road Reserve	Local
Aranda Reserve	Local
Ararat Reserve	Local
Ashworth Reserve	Local
Athlone Crescent Reserve	Local
Ballina Reserve	Local

Name	Park Hierarchy
Belrose Library Reserve	Local
Birrong Reserve	Local
Bluegum Reserve	Local
Boronia Reserve	Local
Calca Park	Local
Camira Close Reserve	Local
Cashel Crescent Reserve (Part Of Downpatrick Road Reserve)	Local
Castle Reserve	Local
Casuarina Reserve	Local
Charleroi Reserve	Local
Coster Reserve	Local
County Road Reserve	Local
Darley Street Reserve (No 2)	Local
Darley Street Reserve (No 3)	Local
Donegal Reserve	Local
End Of Starkey Street Reserve	Local
Epacris Reserve (No 1)	Local
Epacris Reserve (No 2)	Local
Epping Drive Reserve (No 1)	Local
Epping Drive Reserve (No 2)	Local
Estelle Reserve	Local
Finian Reserve	Local
Forest Way Buffer Strip(No 1)	Local
Forest Way Buffer Strip(No 2)	Local
Forest Way Buffer Strip(No 3)	Local
Forest Way Buffer Strip(No 6)	Local
Forestville Park	Local
Garie Place Reserve	Local
Gladys Avenue Reserve	Local
Grattan Crescent Reserve	Local
Greendale Reserve	Local
Greendale Reserve No 2	Local
Hews Reserve	Local
Hurdis Avenue Reserve	Local
Ilford Reserve	Local
Jarrah Place Reserve	Local

Name	Park Hierarchy
Jimada Avenue Reserve	Local
Kalgal Reserve	Local
Kambora Avenue Reserve	Local
Kapunda Reserve	Local
Kapyong Street Reserve	Local
Karalta Crescent Reserve	Local
Karina Reserve	Local
Kew Close Reserve	Local
Killarney Heights Shopping Centre	Local
Kinsdale Reserve	Local
Lara Place Reserve	Local
Marcus Ghatt Smith Reserve	Local
Lindsay Reserve	Local
Lyndale Place Easement	Local
Macfarlane Reserve	Local
Maitland Reserve	Local
Maple Place Reserve	Local
Marnoo Place Reserve	Local
Merrilee Reserve	Local
Munnumba Reserve	Local
Nianbilla Place Reserve	Local
Opala Reserve	Local
Orana Reserve	Local
Patanga Park	Local
Poate Place Reserve	Local
Prahran Avenue Reserve	Local
Prince Charles Road Reserve	Local
Pringle Avenue Reserve	Local
Pusan Reserve	Local
Ralston Reserve	Local
Rangers Retreat Road Reserve	Local
Richard Healy Playing Field	Local
Richter Reserve	Local
Shannon Reserve	Local
Spence Place Reserve	Local
Starkey Reserve	Local
Starkey Street Drainage Reserve	Local

Name	Park Hierarchy
The Grove Reserve	Local
Undula Reserve	Local
Wakehurst Parkway Reserve (No 3)	Local
Wanniti Road Reserve	Local
Wareham Reserve	Local
Warrigal Road Reserve	Local
Warung Reserve	Local
Water Pipe Reserve	Local
Waterford Place Reserve	Local
Wearden Road Reserve	Local
Wentworth Reserve	Local
Windrush Reserve	Local
Wingara Reserve	Local
Yarrabin Reserve	Local
1a Minna Close, Belrose	Local
Adare Reserve	Local
Allworth Drive Reserve	Local
Altona Street Reserve	Local
Angophora Crescent Reserve	Local
Ashworth Avenue Reserve	Local
Bantry Bay Road Reserve	Local
Barnes Road Drainage Reserve	Local
Bate Creek Reserve	Local
Belrose Reservoir	Local
Bluegum Reserve	Local
Boree Road	Local
Brentwood Reserve	Local
Brick Pit Reserve	Local
Brown Street Reserve	Local
Calool Crescent Reserve	Local
Chesterman Reserve	Local
Childs Circuit Reserve	Local
Claire Dean Bush Sanctuary	Local
Cook Street Reserve	Local
Cook Street Reserve (No 2)	Local
Corymbia Circuit Reserve	Local
Davidson Bush Fire Brigade B	Local

Name	Park Hierarchy
Davidson Park Recreation Area	Local
Downpatrick Road Resere	Local
Finch Place Reserve	Local
Fitzpatrick Avenue Reserve	Local
Fitzpatrick Avenue Reserve	Local
Forest Way Buffer Strip(No 7)	Local
Grimes Reserve	Local
Gwarra Reserve	Local
Haigh Avenue Reserve	Local
Harper Place Reserve	Local
Hyde Avenue Reserve	Local
Ilford Road Reserve	Local
Jindabyne Reserve	Local
Kambora Avenue Reserve (No 2)	Local
Keegan Reserve	Local
Kens Road Reserve	Local
Killarney Drive Reserve	Local
Killarney Drive Reserve	Local
Kinsdale Crescent Reserve 2 (Part Of Downpatrick Road Reserve)	Local
Lady Davidson Reserve	Local
Langham Place Reserve	Local
Londonderry Drive Reserve	Local
Macfarlane Reserve	Local
Marcus Place Reserve	Local
Mathews Street Reserve (No 1)	Local
Mathews Street Reserve (No 2)	Local
Maybrook Avenue Reserve	Local
Meredith Place Reserve	Local
Merrilee Crescent Reserve	Local
Middle Creek Reserve (No 2)	Local
Morgan Road Reserve	Local
Morgan Road Reserve (No 2)	Local
Nandi Reserve	Local
Nurragi Place Reserve	Local
Orange Grove Reserve	Local
Oxford Falls Quarry	Local

Name	Park Hierarchy
Parni Place Reserve	Local
Peppercorn Park	Local
Perentie Road	Local
Prahran Avenue Reserve	Local
Rabbett Reserve	Local
Roselands Reserve	Local
Rounce Reserve	Local
Ryrie Avenue Reserve	Local
Ryrie Avenue Reserve (No 1)	Local
Sir Thomas Mitchell Drive Reserve (No 1)	Local
Sir Thomas Mitchell Reserve	Local
Springvale Reserve	Local
Tipperary Avenue Reserve	Local
Valley Road Reserve	Local
Vincent Place Reserve (No 1)	Local
Vincent Place Reserve (No 2)	Local
Wakehurst Parkway	Local
Wakehurst Parkway Reserve (No 1)	Local
Wakehurst Parkway Reserve (No 2)	Local
Wakehurst Parkway Reserve (No 3)	Local
Waterfall Avenue Reserve	Local
Wayne Schimanski Reserve	Local
Wellman Reserve	Local
Willow Way Reserve	Local
Winslea Avenue Reserve	Local
Woolrych Crescent Reserve	Local
Yanco Close Reserve (No 1)	Local
Yindela Reserve	Local
4 Wyatt Ave	Local
180 Forest Way	Local
Brookvale-Dee Why Planning Catchment	
Berry Reserve	Regional
Collaroy Beach Reserve	Regional
Collaroy Beach/Narrabeen Beach	Regional
Curl Curl Beach/Flora&Ritchie Roberts Reserve	Regional

Name	Park Hierarchy
Dee Why Beach Reserve	Regional
District Park	Regional
Fishermans Walk	Regional
Freshwater Reserve (Freshwater Beach)	Regional
Jamieson Park	Regional
Middle Creek Reserve (No 1)	Regional
Birdwood Park	District
Freshwater View Reserve	District
Beacon Hill Reserve	District
Beverley Job Park	District
Brookvale Oval	District
Cromer Park	District
Dee Why Headland	District
Dee Why Lagoon Wildlife Refuge No 373	District
Dee Why Park	District
Devitt Street Reserve	District
Fishermans Walk	District
Freshwater Reserve (Freshwater Beach)	District
Furlough Park	District
Governer Phillip Reserve	District
Griffith Park	District
Hinkler Park	District
John Fisher Park	District
Mckillop Park	District
Queenscliff Headland Reserve	District
South Creek Foreshore	District
South Creek Reserve	District
Stanley & Florence Twight Reserve	District
Stony Range Flora Reserve	District
The Basin	District
Walter Gors Park	District
Government Road Reserve	Local
1 Waterloo Street, Narrabeen	Local
10 Duncan Crs To Anzac Ave Reserve	Local

Name	Park Hierarchy
117 Queenscliff Road, A14:A84queenscliff	Local
14 Richmond Ave To Hawkesbury Ave	Local
17 Graylind Close	Local
1a James Wheeler Place	Local
25-31 Old Pittwater Road, Brookvale	Local
30 Oaks Ave, Dee Why	Local
Aitken Reserve	Local
Alamein Reserve	Local
Allenby Park	Local
Ambleside Reserve	Local
Ankali Place Reserve	Local
Anzac Avenue Reserve	Local
Arthur Reserve	Local
Banksia Street Reserve	Local
Beacon Hill Reserve	Local
Belmore Reserve	Local
Bennett Street Reserve	Local
Birinta Street Reserve (1)	Local
Birinta Street Reserve (2)	Local
Blighs Road Reserve	Local
Brooker Avenue Reserve	Local
Bush Fire Brigade	Local
Bushey Place Reserve	Local
Careden Reserve	Local
Cavill Street Reserve	Local
Chard Road Drainage Reserve	Local
Collaroy Escarpment Reserve (1)	Local
Collaroy Escarpment Reserve (2)	Local
Collaroy Plateau Park	Local
Consul Road Reserve	Local
Corella Street Reserve	Local
Coutts Crescent Reserve	Local
Crawford Place Reserve	Local
Cromer Road Reserve	Local
Crown Road Reserve	Local

Name	Park Hierarchy
Dee Why Parade Reserve	Local
Dee Why Park	Local
Dee Why Town Square	Local
District Park Tennis And Squash Centre	Local
Dorothy Reserve	Local
Drainage Adjacent 34 Abbott Road	Local
Dresden Reserve (Part Of Allenby Park)	Local
Dumic Place Reserve	Local
Earl Reserve (Part Of Allenby Park)	Local
Edgar Cornell Wildflower Garden	Local
Egan Reserve	Local
Eltham Reserve	Local
Endeavour Drive Reserve	Local
Evans Reserve	Local
Fielding Reserve	Local
Friendship Place Road Reserve	Local
Geelong Road Reserve	Local
Gertrude St Road Reserve	Local
Gilles Reserve	Local
Gilmore Avenue Reserve	Local
Golden Grove	Local
Goroka Park	Local
Government Road Reserve (1)	Local
Government Road Reserve (2)	Local
Grasmere Reserve	Local
Griffin Road Reserve	Local
Grover Ave Road Reserve Cromer	Local
Grover Avenue Reserve	Local
Grover Avenue Reserve	Local
Hall Reserve	Local
Harbord E.c.h.c.	Local
Harbord Park	Local
Headland Road Reserve	Local
Holborn Reserve	Local
Howard Avenue Reserve	Local

Name	Park Hierarchy
Ilikai Reserve	Local
Jacka Park	Local
James Morgan Reserve	Local
Jamieson Avenue Drainage Reserve	Local
Kalianna Reserve	Local
Kerry Reserve	Local
Kokoda Crescent Reserve	Local
Lake Reserve	Local
Lakeside Crescent Reserve	Local
Lantana Avenue Reserve	Local
Lidwina Place Reserve	Local
Lillihina Reserve	Local
Lincoln Avenue Reserve	Local
Little Willandra Rd Road Reserve	Local
Lumsdaine Drive Reserve	Local
Maas Street Reserve	Local
Makim Reserve	Local
May Road Reserve	Local
Maybrook Avenue Bushland Reserve	Local
Mcintosh Road Reserve	Local
Meehan Reserve	Local
Michele Reserve	Local
Mill Park	Local
Mills Reserve	Local
Milpera Place Reserve	Local
Monaro Reserve	Local
Moonarie Place Reserve	Local
Mooramba Park	Local
Multi Use Access Path Cromer	Local
Nalya Road Reserve	Local
Narrabeen Lake Islands	Local
Narrabeen Street Reserve	Local
Nenagh Street Drainage Reserves	Local
Northcliffe Ave Reserve	Local
Oaks Avenue Reserve	Local
Ocean Street Reserve	Local
Oceanview Road Reserve	Local

Name	Park Hierarchy
Oxford Falls Road Reserve	Local
Paling Place Reserve	Local
Palomar Pde To Oliver St	Local
Palomar Reserve	Local
Parkes Road Reserve (1)	Local
Parkes Road Reserve (2)	Local
Parkes Road Reserve(3)	Local
Parkes Road Reserve(4)	Local
Parr Reserve	Local
Pavilion Street Reserve	Local
Pinduro Place Reserve	Local
Plateau Road Reserve	Local
Princess Mary Street Reserve	Local
Quarrie Reserve	Local
Quarry Reserve	Local
Ramsay Reserve	Local
Randall Reserve	Local
Red Hill Reserve	Local
Robertson St Reserve (Narrabeen Lagoon)	Local
Ronald Avenue Reserve	Local
Rowena Road Reserve	Local
Ryan Place Reserve	Local
Shirley Close Reserve	Local
St Matthews Farm Reserve	Local
Stephen St Road Reserve	Local
Stoddart Reserve	Local
Stuart Street Reserve	Local
Suffolk Avenue Reserve	Local
Sulman Reserve	Local
Tasman Street Road Reserve	Local
The Crescent Reserve	Local
The Esplanade Reserve	Local
The Glen (Surf Reserve)	Local
Towradgi Reserve	Local
Truman Reserve	Local
Tyagarah Reserve	Local

Name	Park Hierarchy
Undercliff Reserve	Local
Wabash Ave Road Reserve	Local
Wabash Reserve	Local
Wambiri Place Reserve	Local
Warri Reserve	Local
Washington Avenue Reserve	Local
Waterloo Street Reserve	Local
Wedgewood Reserve (Part Of Allenby Park)	Local
Wellington Street Reserve	Local
Wetherill Street Reserve	Local
Wheeler Park	Local
Willandra Road Reserve	Local
Winbourne Road Drainage Reserve	Local
Windermere Park	Local
Wingala Reserve	Local
Yallaroi Road Reserve	Local

Terrey Hills Planning Catchment

J.J. Melbourne Hills Memorial Reserve	Regional
Terrey Hills Oval	District
Anembo Reserve	Local
Anembo Reserve	Local
Bibbenluke Avenue Public Reserve	Local
Burruga Reserve	Local
Coal And Candle Rural Fire Service	Local
Cooyong Road Reserve	Local
Coreen Reserve	Local
Duncan Reserve	Local
Frank Beckman Reserve	Local
Guwara Road Reserve	Local
Kinka Reserve	Local
Kurara Reserve	Local
Lot 1/1132323 Joalah Road	Local
Mona Vale Road Reserve	Local
Myoora Road Reserve	Local
Notting Lane Access Reserve	Local
R.o.w. Adjacent 23 Myoora Road	Local

Appendix 2

Playgrounds list

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
Adare Reserve	Killarney Heights	Frenchs Forest	1	Local
Aitken Reserve	Queenscliff	Brookvale-Dee Why	3	Neighbourhood
Akora Reserve	Frenchs Forest	Frenchs Forest	3	District
Algona Reserve	Bilgola Beach	Mona Vale	3	District
Allington Reserve	Elanora Heights	Mona Vale	2	Local
Allworth Reserve	Davidson	Frenchs Forest	3	Local
Allambie Heights Oval	Allambie Heights	Manly	1	Neighbourhood
Ambleside Reserve	Wheeler Heights	Brookvale-Dee Why	2	Neighbourhood
Anana Reserve	Elanora Heights	Mona Vale	1	Neighbourhood
Angophora Reserve	Forestville	Frenchs Forest	3	Neighbourhood
Ankali Reserve	North Manly	Brookvale-Dee Why	3	Local
Apex Park	Mona Vale	Mona Vale	2	Regional
Aranda Reserve	Frenchs Forest	Frenchs Forest	3	Neighbourhood
Arnhem Rd Reserve	Allambie Heights	Manly	1	Neighbourhood
Avalon Beach Reserve	Avalon	Mona Vale	2	District
Bangalow Reserve	Mona Vale	Mona Vale	2	District
Baranbali Park	Seaforth	Manly	3	District
Bareena Park	Balgowlah Hts	Manly	1	Neighbourhood
Beacon Hill Reserve (Formerly Willandra)	Beacon Hill	Brookvale-Dee Why	3	Neighbourhood
Belmore Reserve	Cromer	Brookvale-Dee Why	1	District
Berry Reserve No 1	Narrabeen	Brookvale-Dee Why	1	District
Bert Payne Reserve	Newport	Mona Vale	1	District
Beverley Job Pk	Narraweena	Brookvale-Dee Why	1	District
Bilarong Reserve	North Narrabeen	Mona Vale	3	District
Birdwood Park	Narrabeen	Brookvale-Dee Why	1	District
Bligh Park	Seaforth	Manly	3	Neighbourhood
Bower Reserve	Manly	Manly	2	Local
Brentwood Reserve	Frenchs Forest	Frenchs Forest	3	Local
Brimbecomb Park	Balgowlah	Manly	3	Local
Brinawa Street Reserve	Mona Vale	Mona Vale	1	Local
Briony Reserve	Mona Vale	Mona Vale	3	Local
Brisbane St Reserve	Balgowlah	Manly	3	Local
Brooker Reserve	Beacon Hill	Brookvale-Dee Why	3	Neighbourhood
Brookvale Oval	Brookvale	Brookvale-Dee Why	1	District
Brown Reserve	Forestville	Frenchs Forest	3	Local
Bruce Bartlett Reserve	Collaroy	Brookvale-Dee Why	1	Regional

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
Buena Vista Reserve	Mona Vale	Mona Vale	2	Neighbourhood
Burruga Reserve	Terrey Hills	Terrey Hills	3	Local
Calca Park	Forestville	Frenchs Forest	1	Neighbourhood
Calistemon Way	Warriewood	Mona Vale	2	District
Canea Reserve	Allambie Heights	Manly	3	Local
Careden Reserve	Beacon Hill	Brookvale-Dee Why	3	Local
Cashel Reserve	Killarney Heights	Frenchs Forest	3	Neighbourhood
Castle Circuit Reserve	Seaforth	Manly	3	Local
Casuarina Reserve	Forestville	Frenchs Forest	3	Neighbourhood
Catalpa Reserve	Avalon	Mona Vale	3	Neighbourhood
Catherine Park	Scotland Island	Mona Vale	2	Neighbourhood
Child's Circuit Reserve	Belrose	Frenchs Forest	3	Neighbourhood
Clontarf Reserve	Clontarf	Manly	3	Regional
Collaroy Plateau Park	Collaroy Plateau	Brookvale-Dee Why	1	District
Cook Reserve	Forestville	Frenchs Forest	2	Neighbourhood
Cooksey Reserve	Freshwater	Brookvale-Dee Why	3	Neighbourhood
Cooleena Reserve	Elanora Heights	Mona Vale	1	Neighbourhood
Cootamundra Reserve	Allambie Heights	Manly	1	Local
Coral Reserve	Avalon	Mona Vale	3	Local
Corbett Playground And Community Garden	Manly Vale	Manly	2	District
Coreen Reserve	Terrey Hills	Terrey Hills	2	Neighbourhood
Coronation Reserve	Mona Vale	Mona Vale	1	Neighbourhood
Coster Reserve	Frenchs Forest	Frenchs Forest	1	Local
Crescent Reserve	Newport	Mona Vale	1	Neighbourhood
Cross Street Reserve	Balgowlah	Manly	2	Neighbourhood
Crown Road Reserve	Queenscliff	Brookvale-Dee Why	3	District
North Curl Curl Community Centre	North Curl Curl	Brookvale-Dee Why	1	Local
Dee Why Beach Reserve	Dee Why	Brookvale-Dee Why	4	District
Dewrang Reserve	Elanora Heights	Mona Vale	1	Local
Donegal Reserve	Killarney Heights	Frenchs Forest	3	Neighbourhood
Dunbar Park	Avalon	Mona Vale	1	District
Duncan Reserve	Terrey Hills	Terrey Hills	1	Neighbourhood
East Esplanade	Manly	Manly	1	Local
Epacris Reserve	Forestville	Frenchs Forest	4	Local
Epworth Park	Elanora Heights	Mona Vale	1	Local

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
F.j. Machon Reserve	Allambie Heights	Manly	1	Neighbourhood
Fairway Reserve	Manly Vale	Manly	1	District
Fernbrook Sanctuary	Warriewood	Mona Vale	3	Neighbourhood
Florence Park	Newport	Mona Vale	3	Neighbourhood
Forestville Community Arts	Forestville	Frenchs Forest	2	Local
Forestville Memorial Oval	Forestville	Frenchs Forest	3	District
Forty Baskets Beach	Balgowlah Heights	Manly	1	Local
Frank Beckman Reserve	Terry Hills	Terrey Hills	1	District
Freshwater Beach Nth	Freshwater	Brookvale-Dee Why	3	District
Freshwater Beach Sth	Freshwater	Brookvale-Dee Why	4	Neighbourhood
Gilbert Park	Manly	Manly	1	Local
Gilbert Reserve	Frenchs Forest	Frenchs Forest	1	Local
Goodwin Street Reserve	Newport	Mona Vale	2	Local
Goroka Park	Beacon Hill	Brookvale-Dee Why	2	Neighbourhood
Governor Phillip Park	Palm Beach	Mona Vale	2	Regional
Grasmere Reserve	Wheeler Heights	Brookvale-Dee Why	1	Neighbourhood
Green Street Playground	Brookvale	Brookvale-Dee Why	2	District
Greendale Reserve No 1	Frenchs Forest	Frenchs Forest	1	Neighbourhood
Griffith Park	Collaroy	Brookvale-Dee Why	2	District
Griffiths St	Balgowlah	Manly	3	Local
Gunyah Place Reserve	Avalon	Mona Vale	3	Local
Gwarra Reserve	Forestville	Frenchs Forest	3	Local
Hews Reserve	Belrose	Frenchs Forest	3	Neighbourhood
Hitchcock Park	Avalon	Mona Vale	2	Local
Holborn Reserve	Dee Why	Brookvale-Dee Why	2	Neighbourhood
Hope St Seaforth	Seaforth	Manly	1	Local
Iluka Park	Palm Beach	Mona Vale	4	Neighbourhood
Ivanhoe Park	Manly	Manly	3	Neighbourhood
Jacka Park	Freshwater	Brookvale-Dee Why	3	District
James Meehan Reserve	Dee Why	Brookvale-Dee Why	2	District
James Morgan Reserve	Cromer	Brookvale-Dee Why	2	District
Jamieson Park	Avalon	Mona Vale	2	Local
Jimada Reserve	Frenchs Forest	Frenchs Forest	3	Local
John Fisher Park Netball	North Curl Curl	Brookvale-Dee Why	2	District
Kalianna Reserve	Beacon Hill	Brookvale-Dee Why	2	Local
Kambora Ave. Reserve	Davidson	Frenchs Forest	2	Neighbourhood

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
Kamilaroi Park	Bayview	Mona Vale	3	Local
Kapunda Reserve	Belrose	Frenchs Forest	3	Local
Karina Reserve	Belrose	Frenchs Forest	1	Local
Katoa Reserve	North Narrabeen	Mona Vale	3	District
Katrina Reserve	Mona Vale	Mona Vale	1	Local
Kerry Reserve	Beacon Hill	Brookvale-Dee Why	3	Local
Killarney Heights Oval	Killarney Heights	Frenchs Forest	3	Neighbourhood
Killarney Heights Shopping	Killarney Heights	Frenchs Forest	1	Neighbourhood
King St Reserve	Manly Vale	Manly	1	Neighbourhood
Koala Place Reserve	Avalon	Mona Vale	2	Local
Koorangi Reserve	Elanora Heights	Mona Vale	3	Local
Kurara Reserve	Terrey Hills	Terrey Hills	1	Neighbourhood
Lagoon Park	Manly	Manly	2	District
Lagoon Park West	Manly	Manly	2	Local
Lakeside Park	North Narrabeen	Mona Vale	2	District
Lillihina Reserve	Cromer	Brookvale-Dee Why	3	Local
Lindsay Reserve	Forestville	Frenchs Forest	3	Neighbourhood
Lionel Watts Reserve	Frenchs Forest	Frenchs Forest	1	District
Little Manly Cove	Manly	Manly	2	Local
Little Manly Point Reserve	Manly	Manly	3	Neighbourhood
Maitland Reserve	Davidson	Frenchs Forest	2	Neighbourhood
Makim Reserve	North Curl Curl	Brookvale-Dee Why	2	Neighbourhood
Manly Dam	Allambie Heights	Manly	1	Regional
Maple Reserve	Belrose	Frenchs Forest	2	Neighbourhood
Marie Crescent Reserve	Mona Vale	Mona Vale	1	Neighbourhood
Maroa Reserve	Allambie Heights	Manly	3	Neighbourhood
May Reserve	Narraweena	Brookvale-Dee Why	1	Neighbourhood
Merrilee Reserve	Frenchs Forest	Frenchs Forest	4	Neighbourhood
Michele Reserve	Cromer	Brookvale-Dee Why	2	Local
Minmai Reserve	Mona Vale	Mona Vale	1	Local
Mooramba Reserve	Dee Why	Brookvale-Dee Why	3	Neighbourhood
Nanbarree Reserve	Balgowlah	Manly	3	Local
Nandi Reserve	Frenchs Forest	Frenchs Forest	1	Neighbourhood
Narrabeen Beach Reserve	Narrabeen	Brookvale-Dee Why	3	Neighbourhood
Narroy Park	North Narrabeen	Mona Vale	3	Neighbourhood
Nianbilla Reserve	Frenchs Forest	Frenchs Forest	3	Local

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
Nolans Reserve No 2	North Manly	Brookvale-Dee Why	3	Local
North Harbour Reserve	Balgowlah	Manly	1	District
North Steyne Minor	Manly	Manly	2	District
North Steyne Major	Manly	Manly	2	District
Orana Reserve	Belrose	Frenchs Forest	3	Local
Orara Reserve	Allambie Heights	Manly	3	Neighbourhood
Palmgrove Park	Avalon	Mona Vale	3	Local
Palomar Reserve	Freshwater	Brookvale-Dee Why	2	Neighbourhood
Pamela Crescent Reserve	Bayview	Mona Vale	1	Neighbourhood
Parr Reserve	Narraweena	Brookvale-Dee Why	2	Neighbourhood
Passmore (Farmhouse C.c)	Manly Vale	Brookvale-Dee Why	1	District
Patanga Reserve	Frenchs Forest	Frenchs Forest	3	District
Peppercorn Reserve	Frenchs Forrest	Frenchs Forest	1	Neighbourhood
Pittwater Park (Palm Beach)	Palm Beach	Mona Vale	3	District
Plateau Park	Bilgola Beach	Mona Vale	1	Neighbourhood
Princess Mary Reserve	Beacon Hill	Brookvale-Dee Why	3	Neighbourhood
Pusan Reserve	Belrose	Frenchs Forest	3	Local
Quarrie Reserve	North Manly	Brookvale-Dee Why	3	Neighbourhood
Rabbett Reserve	Frenchs Forest	Frenchs Forest	3	Neighbourhood
Ralston Reserve	Belrose	Frenchs Forest	2	Neighbourhood
Ramsay Reserve	Collaroy	Brookvale-Dee Why	2	Neighbourhood
Riddle Reserve	Bayview	Mona Vale	1	Local
Ross Street Reserve	Seaforth	Manly	2	District
Ryrie Reserve No 1.	Forrestville	Frenchs Forest	3	Local
Sangrado Park	Seaforth	Manly	3	Neighbourhood
Seaforth Oval	Seaforth	Manly	3	District
Shannon Reserve	Killarney Heights	Frenchs Forest	3	Local
Shearwater Reserve	Warriewood	Mona Vale	3	Neighbourhood
Springvale Reserve	Frenchs Forest	Frenchs Forest	2	Local
Starkey Reserve	Killarney Heights	Frenchs Forest	2	District
Stirgess Reserve	Curl Curl	Brookvale-Dee Why	3	Neighbourhood
Stoddart Reserve	Dee Why	Brookvale-Dee Why	1	Neighbourhood
Surf Reserve	North Curl Curl	Brookvale-Dee Why	3	District
Tania Park	Balgowlah Heights	Manly	1	District
Tatiara Crescent	North Narrabeen	Mona Vale	2	Neighbourhood
Terrigal Reserve	Terrey Hills	Terrey Hills	1	Local

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
The Corso	Manly	Manly	1	District
The Crescent Reserve	Dee Why	Brookvale-Dee Why	3	Neighbourhood
Tower Hill Park (Dalley Park)	Manly	Manly	2	Local
Trafalgar Park	Newport	Mona Vale	3	Neighbourhood
Truman Reserve	Cromer	Brookvale-Dee Why	4	Neighbourhood
Tulich Reserve	Dee Why	Brookvale-Dee Why	2	Neighbourhood
Tyagarah Reserve	Cromer	Brookvale-Dee Why	1	Neighbourhood
Undula Reserve	Belrose	Frenchs Forest	1	Neighbourhood
Valley View Reserve	Warriewood	Mona Vale	1	Neighbourhood
Ventura Reserve	Warriewood	Mona Vale	1	Neighbourhood
Village Park	Mona Vale	Mona Vale	1	District
Wabash Reserve	Cromer	Brookvale-Dee Why	3	Local
Wallaby Circuit	Mona Vale	Mona Vale	1	Local
Walter Gors Reserve	Dee Why	Brookvale-Dee Why	1	District
Wandella Reserve	Allambie Heights	Manly	1	Neighbourhood
Wanganella Street Reserve	Balgowlah	Manly	2	Local
Wareham Reserve	Frenchs Forest	Frenchs Forest	1	Local
Warri Reserve	Narraweena	Brookvale-Dee Why	1	Local
Waterford Reserve	Killarney Heights	Frenchs Forest	3	Local
Wayne Schimanski Reserve	Davidson	Frenchs Forest	2	Neighbourhood
Wedgewood Reserve	Beacon Hill	Brookvale-Dee Why	3	Neighbourhood
Weeroona Reserve	Fairlight	Manly	3	Neighbourhood
Weetawaa Road Reserve	Bilgola Beach	Mona Vale	2	Local
Wellman Reserve	Forestville	Frenchs Forest	3	Neighbourhood
Wentworth Reserve	Belrose	Frenchs Forest	2	Neighbourhood
Whale Beach Reserve	Whale Beach	Mona Vale	2	Neighbourhood
Wheeler Park	Narrabeen	Brookvale-Dee Why	3	District
Wimbeldon Reserve	North Narrabeen	Mona Vale	2	Neighbourhood
Windrush Reserve	Belrose	Frenchs Forest	3	Neighbourhood
Wingara Reserve	Belrose	Frenchs Forest	1	Neighbourhood
Winji Jimmi Reserve	Mona Vale	Mona Vale	1	Local
Winnererremy Bay Parkland	Bayview	Mona Vale	2	Regional
Winsome Reserve	North Balgowlah	Manly	3	Local
Woodbine Reserve	North Balgowlah	Manly	2	Local

Site name	Suburb	Catchment	Condition rating (1-5)	Playground Hierarchy
Woodland Street Reserve	Balgowlah Heights	Manly	0	Local
Woolgoolga Reserve	North Balgowlah	Manly	3	District
Woorarra Lookout Reserve	Elanora Heights	Mona Vale	2	Neighbourhood
Wyatt Reserve	Belrose	Frenchs Forest	3	Neighbourhood
Yanco Reserve	Frenchs Forest	Frenchs Forest	3	Local

Proposed new playspaces

Site name	Suburb	Catchment	Playground Hierarchy
Brick Pit Reserve	Frenchs Forest	Frenchs Forest	Neighbourhood
Condoover Reserve	Allambie Heights	Manly	Local
Parkes Road Reserve	Collaroy Plateau	Brookvale-Dee Why	Neighbourhood
Ashley Reserve	Fairlight	Manly	Local
Fielding Reserve	Collroy	Brookvale-Dee Why	Local
Forestville Park	Forestville	Frenchs Forest	Neighbourhood
Mcdonald Street Road Reserve	North Manly	Brookvale-Dee Why	Local

Appendix 3

Community engagement report

See separate document

Includes:

- Social Pinpoint Analysis
- Telephone Survey Analysis
- Off Road Cycling Survey Analysis
- Written submissions



northern
beaches
council