



Our Rivers

Connecting and activating
Western Sydney
river communities

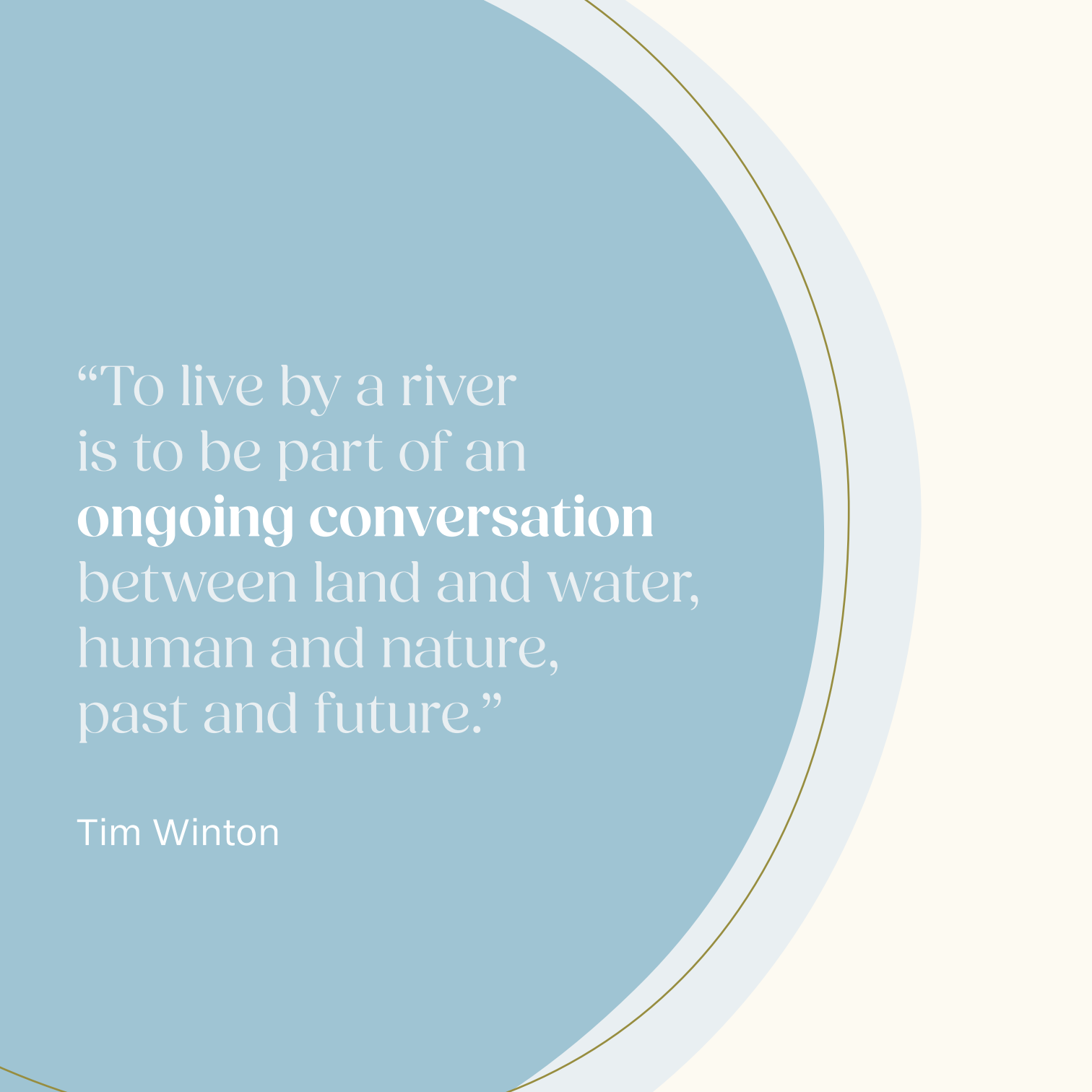
Produced in partnership between

**BUSINESS
WESTERN
SYDNEY**

URBIS

Bentley

September 2024



“To live by a river
is to be part of an
ongoing conversation
between land and water,
human and nature,
past and future.”

Tim Winton

Acknowledgement of Country



Urbis acknowledges the Traditional Custodians of the lands we operate on.

We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years.

We pay our respects to First Nations Elders, past and present.

The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

Title: Sacred River Dreaming

Artist: Hayley Pigram

Darug Nation

Sydney, NSW



PARTNERS



Bentley

Disclaimer

While a wide range of stakeholders have participated in taskforce discussions, the ideas in this document are solely those of Business Western Sydney and do not necessarily represent formal endorsement of individual taskforce participants.

The purpose of this document is to inspire a discussion across the Western Sydney community about the future they want for their waterways.

The next step of this journey is to fully engage with all stakeholders, along with technical investigations and formal decisions.

PARTICIPANTS



Foreword



David Borger

Executive Director,
Business Western Sydney

Western Sydney's waterways – the Parramatta, Hawkesbury-Nepean, and Georges Rivers – represent an extraordinary opportunity to reshape our region's future. With over 275 km of rivers flowing through Western Sydney, it's time we prioritise these natural assets as central to urban planning and community life.

Brisbane, often considered Australia's premier river city, has embraced its waterways with vision and resilience. Western Sydney's rivers, by comparison, remain largely untapped, despite their potential to unlock significant social, environmental, and economic benefits. Imagine vibrant riverfronts with bike paths, jetty pools, and river beaches—places where people can gather, play, and connect with nature.

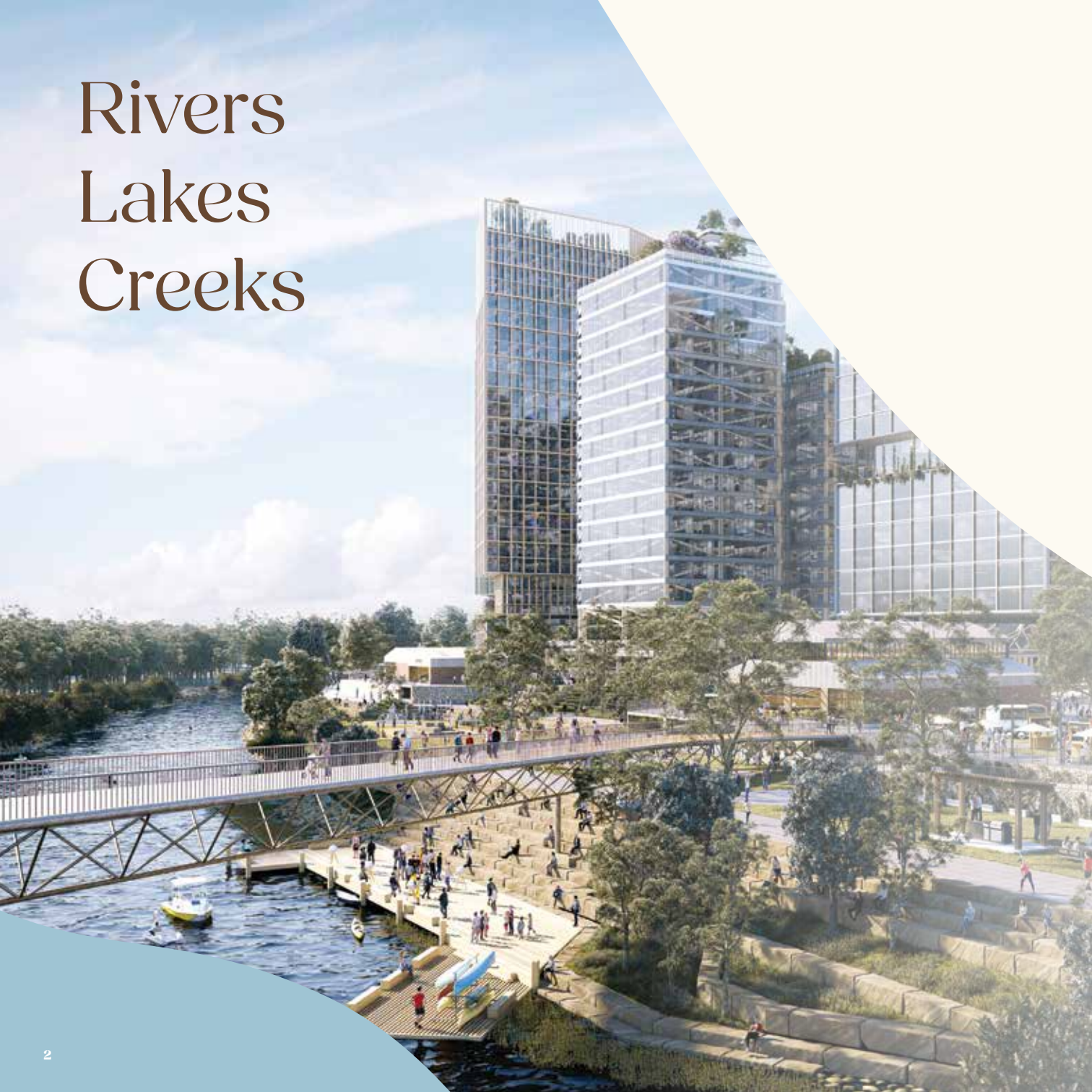
The challenge is to think boldly. With a clear commitment from all levels of government, we can activate these rivers as key infrastructure that serves the community. By doing so, we strengthen ties between people and place, creating lasting benefits for residents, businesses, and the environment.

This document is meant to spark a conversation on how we can transform our relationship with these waterways and reimagine their role in Western Sydney's future. I hope you will come with me on this journey.

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Rivers Lakes Creeks



Backstory

In October 2023, Business Western Sydney brought like minded stakeholders together to discuss the role urban waterways play in Western Sydney, and the challenges and opportunities that exist in ensuring their protection, rehabilitation and revitalisation. That first meeting formed the basis of the Western Sydney Rivers Taskforce (WSRT) and inspired us to advocate for better outcomes for our waterways to support the social, environmental and economic outcomes of our growing city.

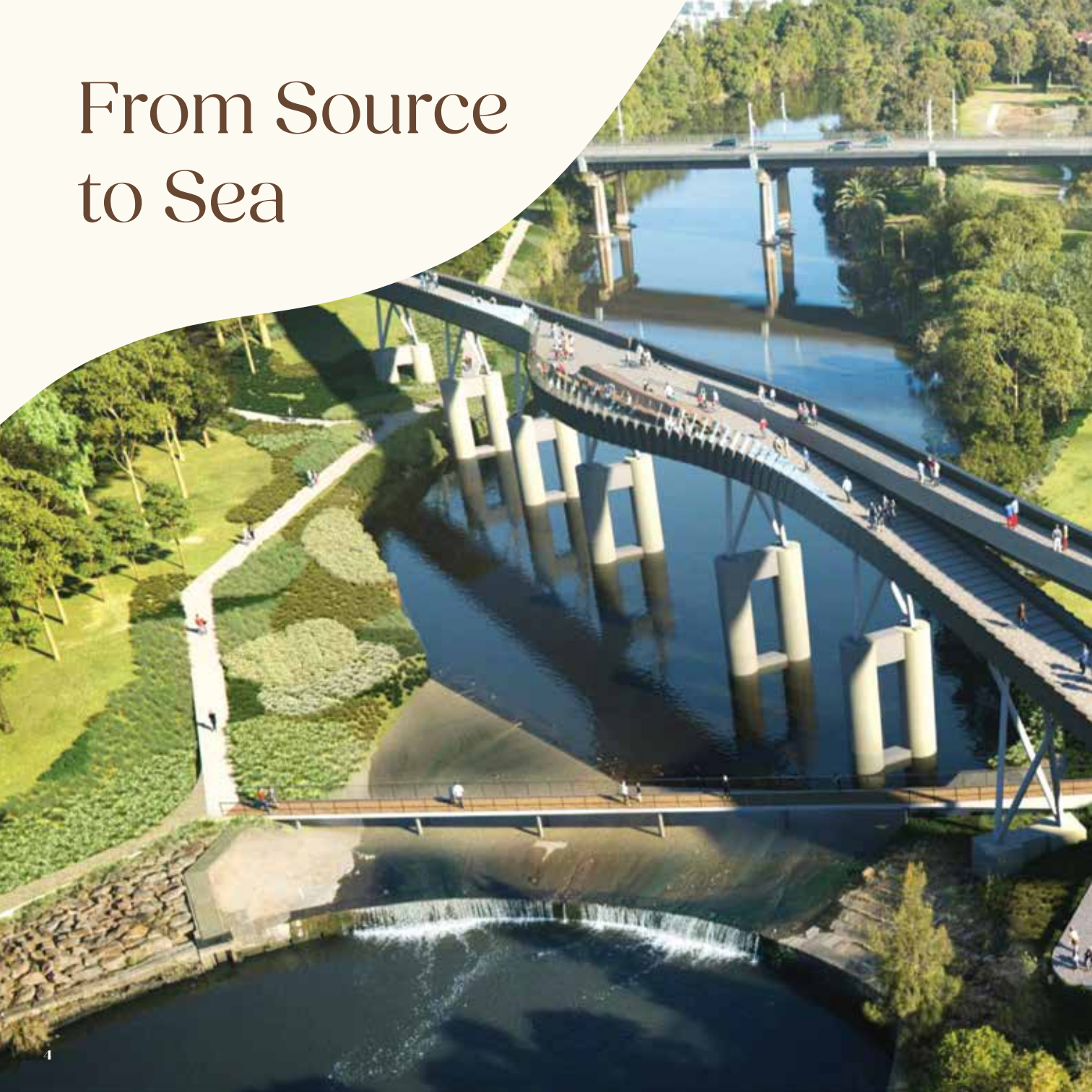
Our first meeting also directly led to the government activation of Penrith Beach, at the Western Sydney Lakes.

Our River Taskforce participants all support the goal of creating greater connection between Western Sydney communities and their waterways. However, they may not necessarily endorse the specific suggestions and activations in this book. We are aiming to challenge and inspire, and not to impose our specific vision.

First Western Sydney Rivers Taskforce meeting
10 October 2023



From Source to Sea





Mission

We want to better connect Western Sydney communities to their waterways.

Objectives

We are urging the NSW Government to adopt these bold objectives that support the vision we have for our rivers – connected and activated local waterways that support economic activity, sustainability and stronger communities.

1. To ensure all Western Sydney residents have access to clean and healthy waterways for swimming and recreation within 30 minutes of their home.
2. To revitalise and activate river foreshore areas in our urban centres, to support the economic and social well-being of our city.
3. To protect and improve environmentally sensitive waterways.
4. To embed First Peoples knowledge and involvement into the planning and management of all waterways.

Waterways



The Problem

Communities in Western Sydney are disconnected from their rivers and waterways, a consequence of two centuries of fragmented planning, poorly managed flood events, and development that has often turned its back on these natural assets. This disconnection has led to poor social, environmental, and economic outcomes. These challenges are exacerbated by the region's unique climate challenges.

Research shows that communities living near water experience better mental health, reduced stress, and greater life satisfaction. In contrast, disconnected communities tend to face poorer health outcomes, including higher rates of obesity, heart disease, and a reduced likelihood of meeting physical activity guidelines. The absence of integrated blue and green infrastructure has also contributed to environmental degradation, limiting ecological diversity and the benefits of 'provisioning services' that come from well-maintained natural environments, such as air and water quality.

Community-connected waterways offer climate resilience and significant cooling effects, which can reduce temperatures by up to 2.9°C. Western Sydney experiences significantly higher temperatures than coastal Sydney.

The difference can be as much as 10°C on very hot days, a disparity driven by poor planning and the region's distance from cooling sea breezes. This is particularly concerning as the frequency of hot days (>35°C) and extreme heat (>40°C) in Western Sydney has increased dramatically since 2005, with projections indicating 93 hot days and 26 extreme heat days annually by 2050.

Compounding this issue, many existing developments in Western Sydney either lack public access to waterways or have treated these areas as back-of-house spaces, cutting off communities from opportunities to recreate, connect with nature, and enjoy economic benefits like tourism. Public awareness of waterway access is low, as there is no single trusted source of information about recreational opportunities.

To improve the social, environmental, and economic wellbeing of Western Sydney, better connection to waterways is essential. Creating a network of accessible blue infrastructure will not only enhance community resilience but also help mitigate the impacts of extreme heat, boost physical activity, and generate economic opportunities through recreation and tourism.



Western Sydney experienced eight days over 40°C compared to zero in the city's East.

- > Western Sydney is 6 – 10°C hotter during extreme heat events.
- > 10 additional days per year over 40°C projected by 2030.

43.4°C

7th Jan 2018

30.5°C

13th Jan 2017

○ **Penrith**

○ **Sydney CBD**

44.8°C

13th Jan 2017

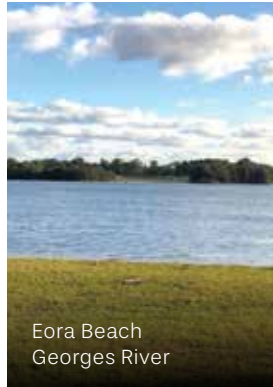
47.3°C

7th Jan 2018

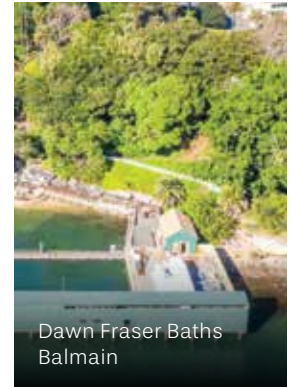
The Divide

Water Front

WEST

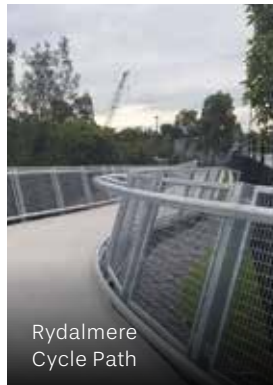


EAST



Walking Trails

WEST



EAST



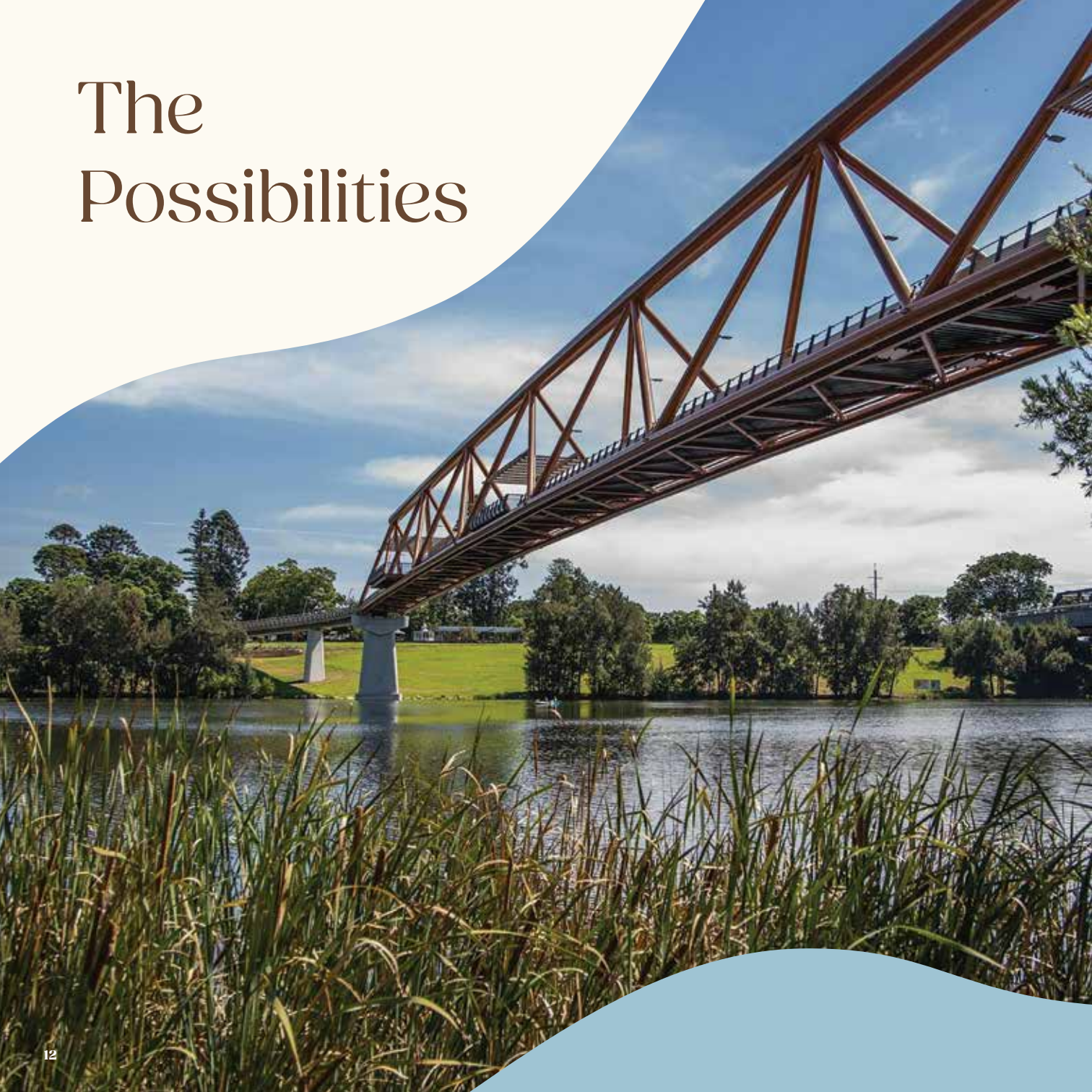
West



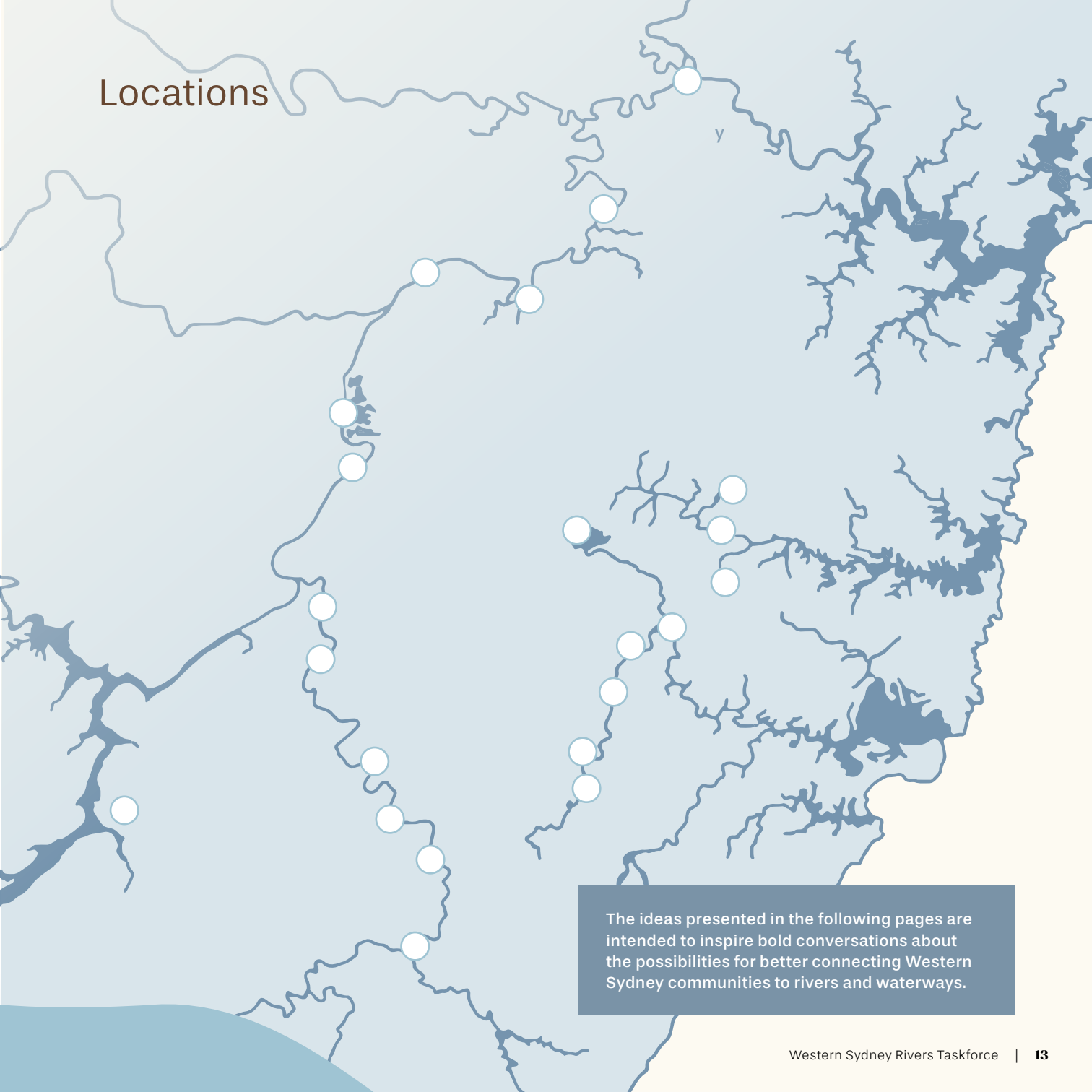


East

The Possibilities



Locations



The ideas presented in the following pages are intended to inspire bold conversations about the possibilities for better connecting Western Sydney communities to rivers and waterways.

Activations



River beaches

River beaches serve as a unique urban oasis, providing the community with a space to relax, socialise and engage with the local river and its environment.



Change rooms

Integrating change rooms into riverside developments enhances recreational use, encouraging more people to engage in water-based activities.



Jetty pools

Introducing jetty pools along our rivers provides safe and accessible swimming spots for the community, enhancing a rivers overall usability.



Bike tracks

Bike tracks not only promote active transportation and fitness, but also offers a scenic route to appreciate the natural beauty of our waterways.

On Water Activities

In addition to creating opportunities to swim, our rivers present significant opportunities for popular 'on water' activities too – such as kayaking and canoeing, paddle boarding and rafting.

Such activities enable people in the first instance to enjoy water activities with incidental/secondary water contact only without full body immersion.

Working with stakeholders such as Paddle Australia, NSW Maritime and Councils, there may be opportunities to see early activation of river locations for 'on water' activities – as an important stepping stone toward full swimming opportunities.





Healthy Waterways, Healthy Communities

Activated waterways offer significant benefits for community health by encouraging outdoor physical activity and recreation, which supports greater social interaction, leading to a fitter and healthier population.

While the initial investment in revitalising these areas may be substantial, the long-term savings in public health expenditure can be considerable. By promoting active lifestyles, active waterways help reduce the incidence of chronic diseases such as obesity, heart disease, and mental health disorders, lowering the demand for healthcare services. This shift towards prevention, rather than treatment, can result in significant cost savings for governments while improving overall community well-being.





Nepean





The Nepean River (**Darug: Yandhai**), is a major perennial river, which almost entirely encircles metropolitan Sydney. The Nepean continues on to become the Hawkesbury River at the convergence of the Grose River.

The Nepean supplies water to Sydney's five million people as well as supporting agricultural production. This, combined with increased pressures from land use change for urban development, means the river faces significant challenges into the future.



Appin Beach

This hidden gem could offer a peaceful retreat for locals and visitors, with its picturesque setting and opportunities for water-based activities.

Menangle Beach

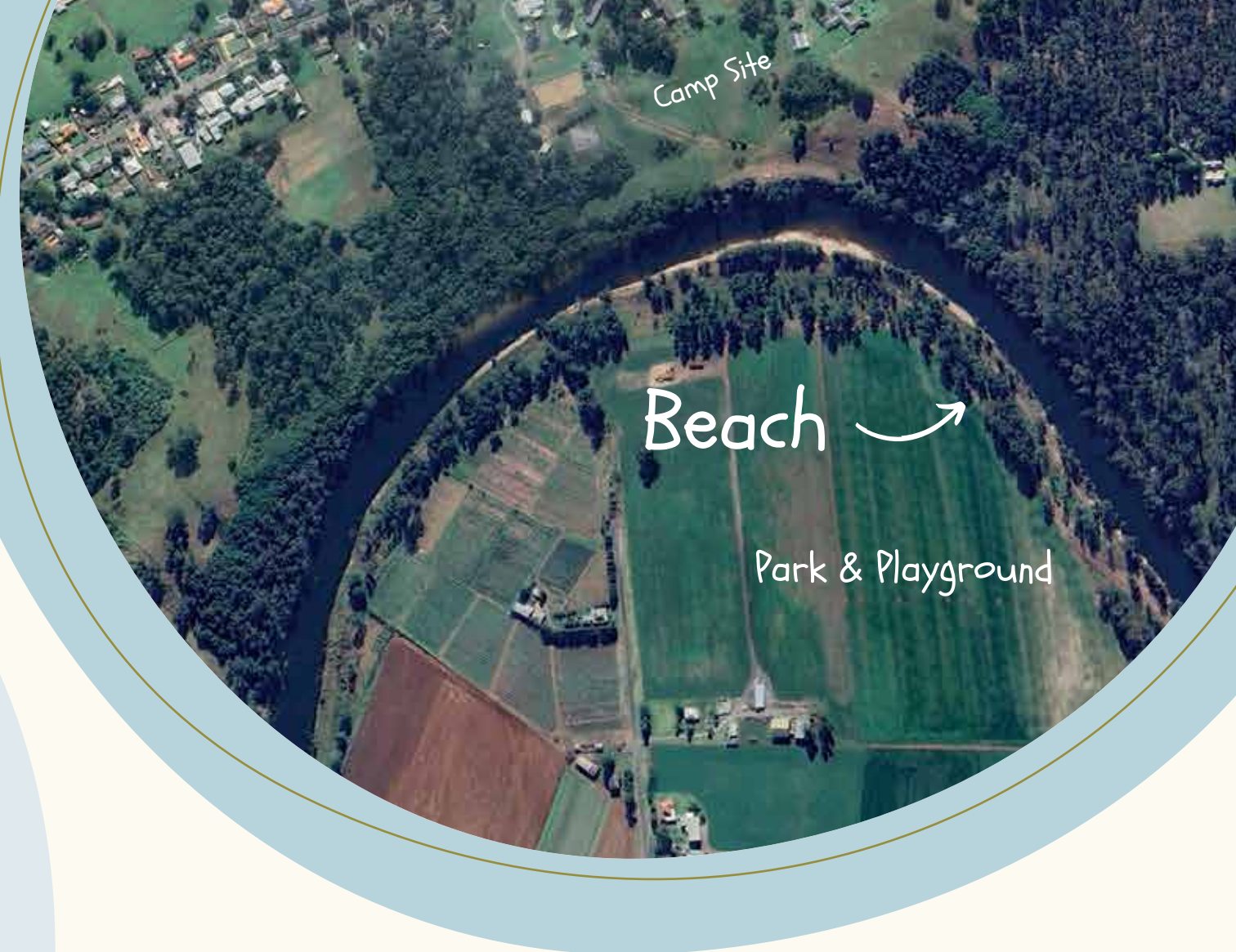
Menangle Beach is a tranquil riverside spot offering a natural retreat for relaxation and recreation. It could include amenities such as change rooms and a riverside bike path.



Camden Lakes

Camden Lakes could be positioned next to an artificial lake, providing great opportunities for water sports. The riverside bike path will link spots along the Nepean River.





Cobbitty Beach

As well as providing swimming access, Cobbitty Beach could include children's amenities such as a park and playground, as well as camping facilities.



Burragorang House

Overlooking stunning views of Lake Burragorang, this significant landmark could feature walking trails, a lookout, visitor centre and eco-tourism.

Wallacia Beach

Wallacia Beach could provide residents with various amenities, including a park and change rooms. A visitors car park will provide direct access to the beach.



Bents Basin

This deep waterhole forms part of a gorge on the Nepean River, offering an adventure-filled escape with opportunities for camping, swimming, and picnicking amidst the stunning natural landscape.





Penrith City Beach

Penrith City Beach is envisioned as a safe, accessible swimming spot that will transform the riverfront into a vibrant recreational hub, enhancing the city's liveability and connection with the river.



The Lakes

This series of interconnected water bodies offer a diverse range of recreational opportunities, from boating and fishing to birdwatching and picnicking, making it a vibrant hub of outdoor activity and natural beauty.

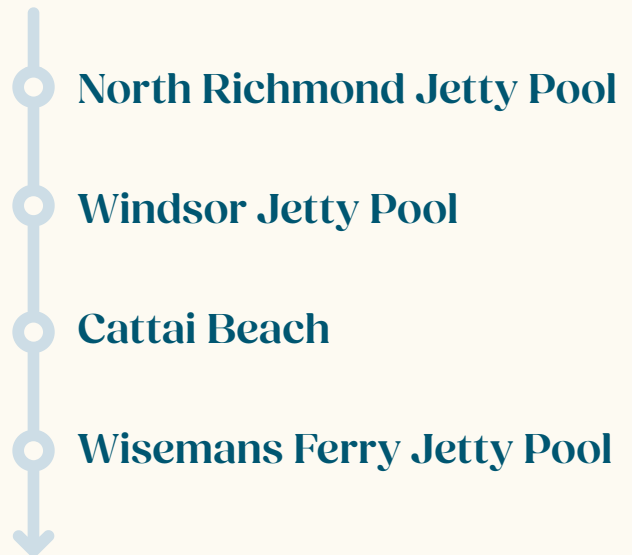
Penrith Lakehouse

This much loved beach activation provides a sandy retreat for relaxation, picnics, swimming and water activities. Penrith Lakehouse could provide additional activation offering a significant tourism destination for Western Sydney.



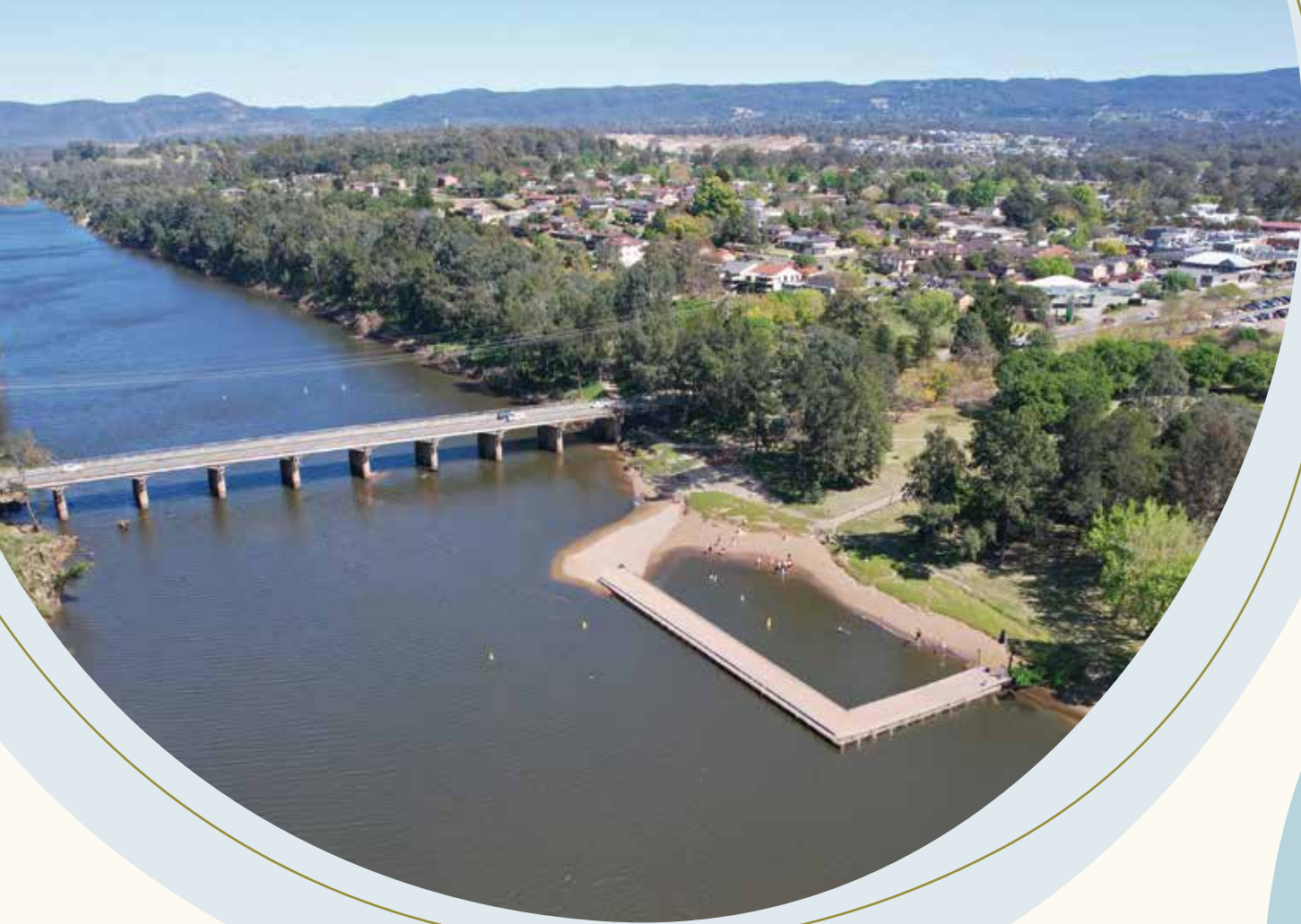
Hawkesbury





The Hawkesbury River (Dharug: Dyarubbin), is a significant meandering waterway. Its origin is found at the confluence of the Nepean and Grose Rivers, to the north of Penrith and travels for approximately 120 kilometres which almost entirely encircles north-west metropolitan Sydney.

Despite forming the effective boundary of the metropolitan region of Sydney for its entire length, there are very few fixed crossings of the Hawkesbury River proper.



North Richmond Jetty Pool

The envisioned North Richmond Jetty Pool could provide residents with a safe and accessible swimming spot along the Hawkesbury River adjacent to Hanna Park.

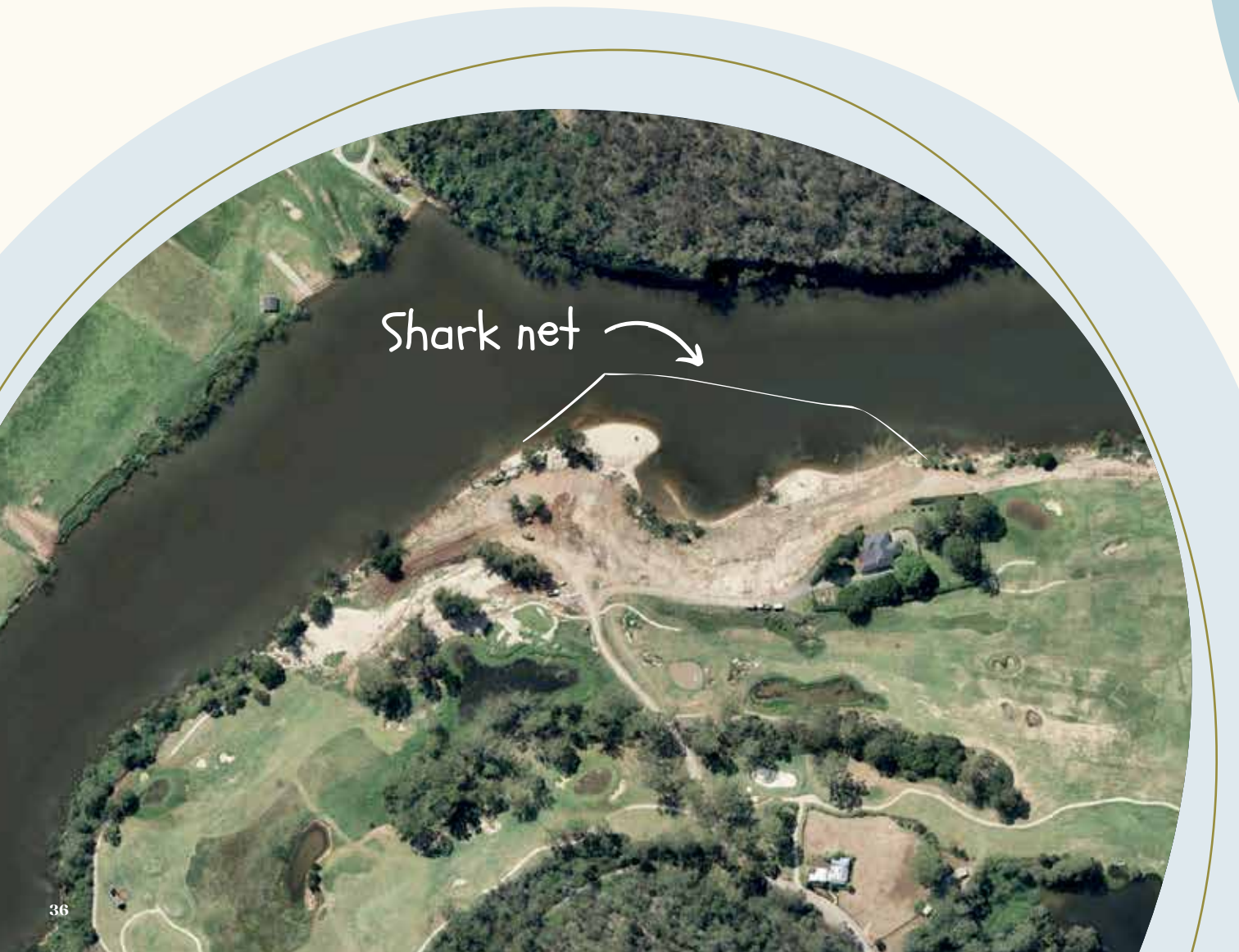
Windsor Jetty Pool

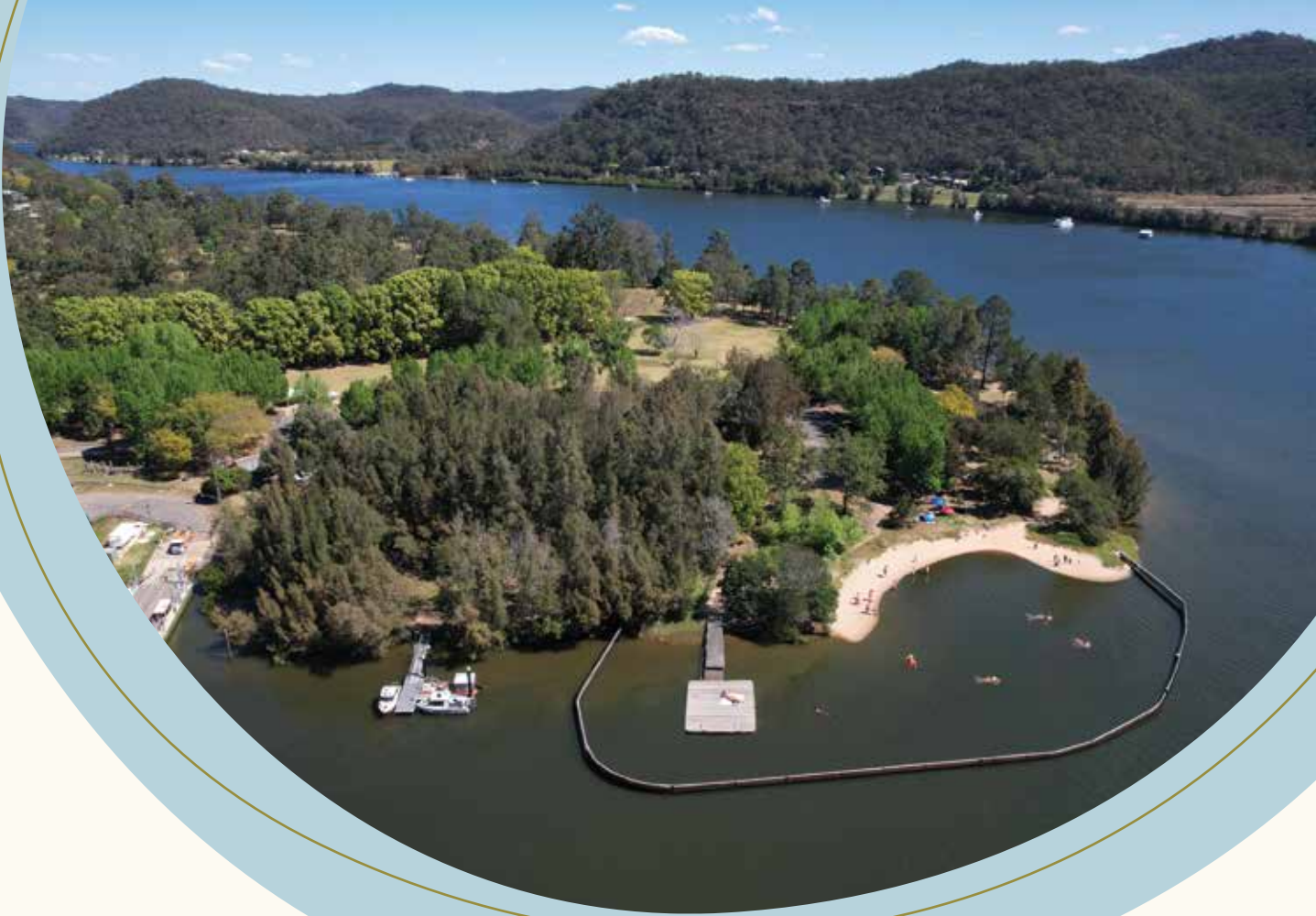
Similarly, the Windsor Jetty Pool could also provide local residents with a safe swimming spot with the inclusion of a shark net adjacent to Governor Phillip Park.



Cattai Beach

This charming riverside spot could also see the addition of a shark net to encourage swimming and use of the river.

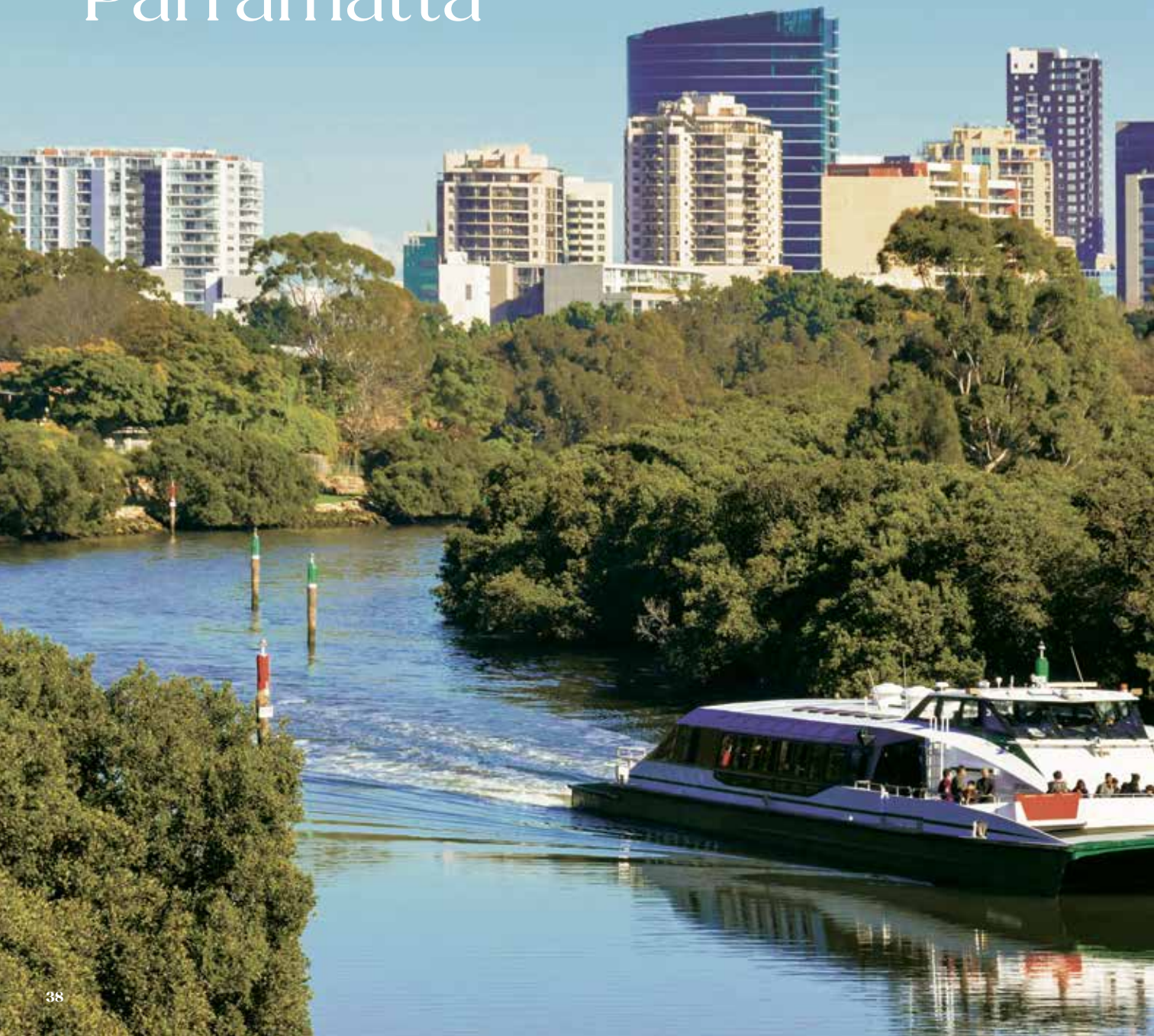




Wisemans Ferry Jetty Pool

Situated alongside the ferry crossing, the development of a beach front with a jetty and shark net could encourage use of this stunning and historic waterway.

Parramatta





Lake Parramatta

City River Activation

Camellia Lagoon

Duck River

Newington Armory

The Parramatta River (Darug: Burramattagal), is an intermediate tide-dominated, drowned valley estuary. The Parramatta River is the main tributary of Sydney Harbour, a branch of Port Jackson.

The headwaters of the Parramatta River are formed by the confluence of Darling Mills Creek and Toongabbie Creek.



Lake Parramatta

This natural reserve in North Paramatta is a popular swimming and boating spot with abundant wildlife and scenic bushland, it is also a favourite amongst hikers. This location would benefit from the addition of a sand beach.

City River Activation

City river activation could see multi-use spaces created along the banks to encourage outdoor activities as well as increase the current ecological value of the river.



Camellia Lagoon

Development of Camellia lagoon could see the creation of an urban oasis. The beachfront will include food and beverage retail venues while the rivers edge will feature a bike path.





Duck River

The conversion of the current Cumberland City Council depot to a community precinct that includes a public pool, gym, restaurants and entertainment that overlooks the river and the botanic gardens.



Newington Armory

This historic military site turned vibrant cultural precinct offers a unique blend of arts, history, and nature experiences, making it a fascinating destination for locals and visitors alike.



Georges





The Georges River (Tocoreah) is an urban river in southern Sydney that flows from the headwaters on the Illawarra escarpment and Appin down to the river mouth at Botany Bay. The total length of the Georges River is estimated to be about 96 km long. The catchment area of the Georges River covers an area of approximately 960 km².

The river has a number of important tributaries including Bunburry Curran Creek in Glenfield, Cabramatta Creek in Cabramatta, Prospect Creek in Georges Hall, Williams Creek in Holsworthy, Salt Pan Creek in Padstow, Mill Creek in Menai, and the Woronora River in Illawong.



The Woolwash

The Woolwash is a tranquil riverside spot that provides the perfect spot for those seeking to connect with nature within the city's bounds. Additional walking trails, water accessibility, and better phone reception would provide safer access.

Kentlyn Basin

This natural sanctuary offers a serene waterhole for swimming as well as a lush riverside for picnicking, and a rich habitat for local wildlife. Additional walking trails, water accessibility, and better phone reception would provide safer access.



Simmos Beach

Simmos Beach is accessible with picnic and BBQ facilities. It is the ideal starting spot for walking trails, and bird watching and is also a great spot for a swim.





Glenfield Park Beach

A native botanic garden, children's playgrounds and bike paths could breathe life into Glenfield park, encouraging outdoor play and education of our native flora.



Moore Point

This urban precinct could feature a landscaped waterfront with pools, parklands and markets. It will reshape Liverpool and create a loved destination for locals and visitors alike.

Haigh Beach

The development of beach amenities such as boat sheds and shark nets could see Haigh Park transformed into an idyllic location for swimming and water sports.



Chipping Norton Lake

This man-made lake could see the development of two swimming beaches that could transform Chipping Norton and activate the lake for recreational use. Better remediation and management of these beaches with the addition of shark nets could allow greater community access.





Dhurawal Bay Beaches

Dhurawal Bay could see the development of three separate beaches on its banks, transforming the bay into an area of activity, encouraging water sports and swimming.



Lansvale Beach

Lansvale Beach could feature a long sandy beach front with a jetty and shark nets at either end. A boat shed and beach club could also be established, offering a variety of recreational water-based activities.



Prospect Beach





Development of a Prospect Beach could see a revitalised reservoir. A jetty, sail club and beach house would allow for maximum use of the reservoirs vast flat waters.

Examples of Activation





In recent years, there has been a growing trend of wild swimming and urban water activation, reconnecting people to their local waterways and transforming once neglected rivers into vibrant community spaces. This resurgence is driven by a broader environmental awareness and a desire to reclaim urban natural spaces for recreation and social connection.

All waterfront sites are intrinsically part of a bigger system, and the cumulative benefit of redeveloping a network of these sites offers a significant strategic opportunity for cities. By enhancing ecological health and connecting citywide movement networks, waterfronts can accommodate urban growth and become focal points for public life. Notable examples include the creation of artificial beaches along the Seine River in Paris, where once-polluted waters now support swimming and leisure activities, and the construction of the Floating Urban Sanctuary on the Chicago River, which integrates green space and encourages urban wildlife, all while fostering community engagement with the water.

Tourism today increasingly emphasises local experiences, and the waterfronts of any city provide the perfect stage for this, often acting as key cultural and social hubs. Identifying the unique characteristics and 'stories' of each waterfront early on is crucial to making these spaces central to urban renewal strategies. Projects like these exemplify a global shift towards place-making, where natural environments are intertwined with urban life, creating not only ecological benefits but also deeper connections between people and their cities.



Chicago

The Chicago Riverwalk is a vibrant waterfront park offering a dynamic blend of recreational, cultural, and dining experiences along the Chicago River. A landscaped promenade, public art installations, boat tours and wine tastings make it celebrated riverfront development.

New York

New York's Floating Pool is a unique concept that provides a safe and accessible swimming spot to New Yorkers. Re-imagining how urban spaces might be utilised to enhance engagement with the city's aquatic environment.



Wagga Beach

Wagga beach provides the locals of Wagga Wagga with shady parklands, a sandy shore and water for a swim. It is a beloved destination for locals and visitors seeking to enjoy the water during summer and soak in the natural beauty.





Paris

The Paris Plages transform sections of the Seine's banks into urban beaches every summer. With deck chairs and a variety of recreational activities, these temporary beaches bring a seaside ambience to the heart of this iconic city.



Chicago Riverwalk

Stretching along the Chicago River, this bustling waterfront offers a myriad of recreational, dining, and cultural experiences. It serves as a vibrant communal space, enhancing the city's connection with its historic river.



Copenhagen

Copenhagen is a model for livability and integration with a city's waterways. Its waterfront areas are populated with dining venues, recreational activities and cultural experiences, all connected via an extensive network of cycling paths.



Barangaroo

This revitalised precinct seamlessly blends urban living with the natural beauty of the harbour. It's lush parklands, bustling dining scene and rich tapestry of cultural experiences make it a shining example of water-side living.



Battersea, London

River front walkways, bustling eateries and cultural and entertainment attractions offer a vibrant blend of recreation, and the arts to Battersea.

Shaping Vibrant Waterfronts

Our waterways, harbours, rivers and coastlines are the lifeblood of our cities and have shaped settlement patterns for millennia.

Australian cities are realising the potential of waterfront land. They are reconnecting with their waterfronts, transforming neglected post-industrial docklands into contemporary cultural, recreational and lifestyle spaces.

These waterfronts are becoming home to major public facilities and open spaces. Ensuring best practice design of waterfronts is paramount to the success and liveability of our cities.

The ideas for shaping successful, vibrant waterfronts in this report are intended to inspire new possibilities for Western Sydney rivers and waterways.





Insights to Unlock the Potential of Western Sydney Waterfronts

Think Strategically: Waterfronts should work hard to support urban growth

All waterfront sites are intrinsically part of a bigger system. The cumulative benefit of the redevelopment of a network of waterfront sites offers a significant strategic opportunity for cities. They have the ability to accommodate urban growth, connect city-wide movement networks and become a focus for public urban life.

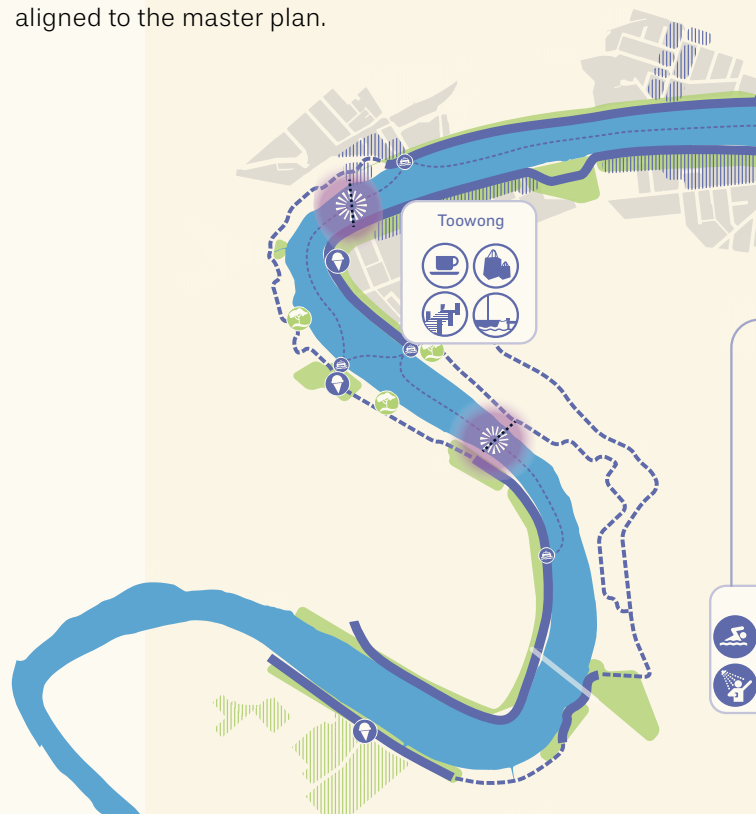
- Wider master planning and strategic frameworks are required to best identify opportunities and understand the scale and sequence of change required.
- Strategically focus density around high amenity locations, such as waterfronts, as they have the best chance of success.

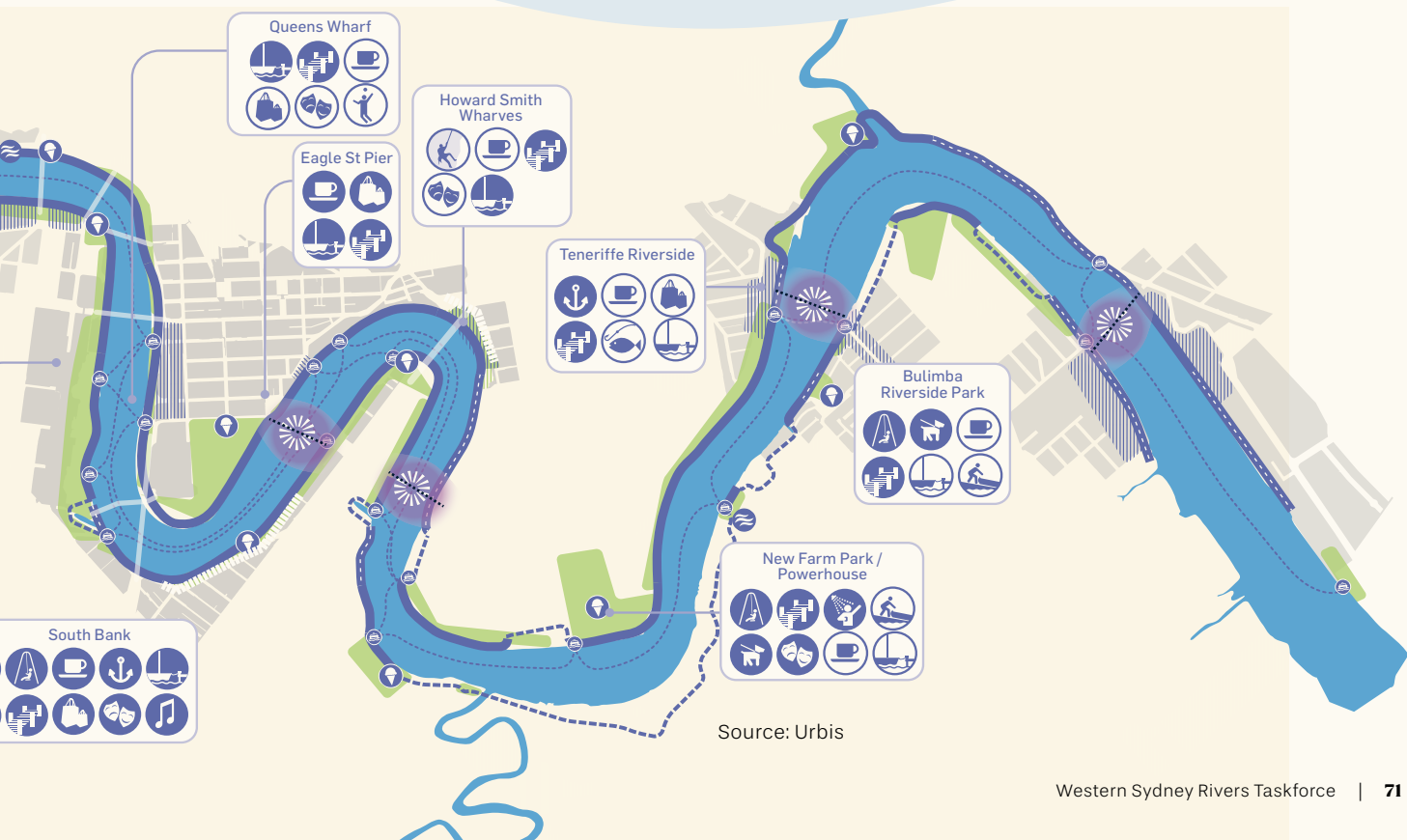
Brisbane City Centre Master Plan

Brisbane is arguably Australia's best river city and the heart of the community. Brisbane City Council and the Queensland State Government developed a long-term vision and strategic framework with the adoption of the Brisbane City Centre Master Plan in 2014 that established a coordinated approach to guide future development, transport, and public space investments over the next 20 years.

The Brisbane City Centre Master Plan sets out a bold vision that recognises the river has great untapped opportunity for the expression of outdoor lifestyle.

Howard Smith Wharves, Queens Wharf, Teneriffe, South Bank, New Farm Park and Powerhouse are all significant precincts and activity hubs that draw inspiration from their proximity to Brisbane River, aligned to the master plan.





Source: Urbis

Local Relevance

Success is reliant on local engagement

Shaping cities today is all about creating authentic experiences. People everywhere are seeking opportunities to have more meaningful encounters with places and cultures.

As tourists, we want to go where the locals go and do what the locals do. We seek insider knowledge that allows us to become 'temporary residents' and experience the best of a city. This phenomenon of 'experience' is not limited to tourists alone. Locals too are looking to become tourists in their own cities.

Many of our waterfront sites have extensive, far-reaching histories that have defined the settlement patterns and development milestones of our cities. The redevelopment of these sites presents a significant opportunity to unlock the history of our cities, and at the same time, provides opportunities to see what the future might hold.

- Use local operators, local events, the local climate, local history, and the local community to create experiences that are compelling and truly distinctive for everyone.

Howard Smith Wharves

Set underneath Brisbane's renowned Story Bridge, the revitalisation of the historic Howard Smith Wharves precinct unlocks the potential of this significant site. Since opening, the precinct has surpassed all visitor number expectations. Forecasts anticipate visitation numbers at 5.5 million domestic and 1 million international visitors annually.

- Bustling docks, tourism operators, amphitheatres, floating stage sets, children's play and boutique accommodation are all set against the backdrop of dramatic cliffs and heritage wharf buildings.

> Refurbished heritage site transformed into a world-class tourism destination

> Major events venue

> Vibrant waterfront with a mix of food and beverage venues

> Accessible via lifts on Bowen Terrace above and riverwalk

> 80 per cent of the precinct to publicly accessible open space 24/7

Source: Woods Bagot



Variety of Experience

Make places for everyone

Rivers, bays, seafronts, harbours, climatic orientation, tidal variance, demographics, and a host of other factors, give an almost endless palette from which to create great places.

Water bodies are often expansive spaces and inherently are the grand gesture themselves. To complement this, design a series of small spaces with variety and richness to bring back the human scale and create relevance.

- Diversity of space drives visual interest but it is critical that it is unified in some way. Art, lighting, structures and landscape strategies all have a role to play here.
- Food and beverage, retail and commercial activities bring life and sustainability to the modern urban waterfront.

Wild Mile Chicago: The World First Floating Riverpark

Wild Mile is a community-stewarded eco-park that transforms a branch of the Chicago River from an industrial canal into an inviting habitat for wildlife and a living laboratory for education and research. The Wild Mile takes a wildlife-first approach to public greenspace. Combining accessible boardwalks with floating artificial habitats, the Wild Mile remains open to the public 24/7 and is used as a space for recreation, education, research, community gatherings, and more.

- > **New environment for habitat, education, and recreation**
- > **Eco-park that serves people, wildlife, and the environment**
- > **Series of floating gardens with public walkways, and kayak docks designed to restore the river as a public trust**

Source: Urban Rivers and SOM



Make Destinations

Concentrate activity in contained nodes

Our waterways have always been places full of activity, from the focus of industry to an essential mode of transport and now as major recreational destinations and stages for civic events. The activation of these waterfront spaces is a key factor in their success.

Concentrating activity in and around carefully located nodes rather than thinly spreading it along a continuous edge ensures the creation of usable, safe and inviting spaces during the day and at night. This also allows these nodes to be developed as identifiable destinations. As destinations, they attract people and create the vitality that is essential for successful urban places.

- Define clear nodes of activity, each with a clear function and distinctive function.
- Avoid the approach of trying to 'activate' everything and spreading uses so thinly that no critical mass is ever formed.

Rockhampton Riverside

Rockhampton's iconic riverside precinct on the banks of the Fitzroy River (Tunuba) was revitalised by establishing a high-quality public realm space that is widely celebrated and used by the community.

The project features playground areas, river lookouts, shaded walkways and gathering spaces, a new pier structure with restaurant and amenities, renewed garden beds, public art installations, a water play area including an illuminated pop-jet plaza, a five-metre wide digital water wall and misters.

- > **Connected to the city's CBD**
- > **Responsive to river flooding**
- > **Celebrates heritage buildings**
- > **Provides a platform for festivals, celebration and community gathering**

Source: Urbis



Design for Change

Embrace the changing environment

Waterfronts are some of the earth's most dynamic places. From daily tidal cycles to storm surges and the long-term impacts of climate change, our waterfronts are always changing.

Good design uses creative solutions and offers incremental investment strategies that future-proof waterfront amenities and community assets. Designs should utilise predictable daily and seasonal changes of flow and tide, looking for and celebrating uniqueness.

- Balance environmental considerations, engineering requirements and responsive design.
- Maximise opportunities for education and learning associated with the natural environment.

Wagga Wagga Riverside Park

Wagga Wagga's Riverside waterfront reinforces the relationship between the Murrumbidgee River and the City. The revitalised Wagga Wagga Riverside Park celebrates the heritage landmarks, its context, and celebrates public realm and city liveability. A series of spaces includes a bandstand, outdoor stage, water play and adventure play spaces, riverside foreshore plaza, fitness circuits and open expanses of lawn for large community gatherings.

- > **An iconic recreation and cultural destination**
- > **Activate and attract visitation**
- > **Improve public realm and city liveability**
- > **Reinforce linkages between the river and the city's CBD and civic precinct**
- > **Infrastructure resilient to flooding**

Source: Urbis



Connect to Everything

Anchor waterfronts back into the community

As most waterfronts are linear, activity tends to be focused on the water's edge. It can be a challenge to create paths, journeys and connections inland.

Boldly making clear linkages between the water's edge and other parts of the city serves to create connectivity. This can tie employment centres, cultural institutions and transport nodes to the amenity of the waterfront.

- Provide regular physical and visual perpendicular connections to the water's edge, linking the waterfront to inland neighbourhoods and destinations.
- Supplement large 'urban scaled' connections with a fine mesh of intimate and 'discovered' connections.

The Connection, Rhodes, Sydney

The City of Canada Bay's community precinct, the Connection is an optimistic, playful, open space for all to enjoy. Situated on the shores of the Parramatta River, the design includes a large amphitheatre that intersects with a linear boardwalk. This overlap deliberately ensures people moving and lingering intersect, creating a diversity of user groups and opportunities for engagement.

- > **An iconic recreation and cultural destination**
- > **Activate and attract visitation**
- > **Improve public realm and city liveability**
- > **Reinforce linkages between the river and the city's CBD and civic precinct**
- > **Infrastructure resilient to flooding**

Source: Kane Constructions



Interaction Nodes

Encourage people to interact and enjoy key nodes

The beauty and activity at our waterfront spaces attract people for many reasons. Be it active recreation, family picnics or major civic events, our waterfronts need to be flexible places that can accommodate both the everyday and the extraordinary.

To achieve flexibility, and ensure that no one group dominates the water's edge, designing in conflict, in the form of shared vehicular and pedestrian nodes, with weaving cyclist and pedestrian routes and intersecting gathering spaces.

- Conflict at key nodes encourages people to slow down and stop, explore, meet and interact.
- An events overlay at public domain nodes along waterfronts ensures socialisation opportunities.

Copenhagen Harbour Bath, Copenhagen

A terraced, urban harbour landscape, the Copenhagen Harbour Bath offers a variety of spaces for recreation and play. As an extension of the land, the "harbourscape" provides key focus for activity that caters for a wide variety of people.

Rather than imitating the traditional Danish indoor swimming bath, the Harbour Bath offers an urban harbour landscape with dry docks, piers, boat ramps, cliffs, playgrounds and pontoons.

- > **Extension of adjacent park over water**
- > **Accessible and inclusive design**
- > **Designed to maximise visibility of all swimmers with clear sightlines for lifeguards**

Source: BIG + JDS



Ease of Access is Key

Connectivity, public transport and car parking

Many waterfront spaces, particularly those in the inner-city, are regionally significant places and the level of investment, amenity and facilities attract significant numbers of visitors at all times of the day.

Whilst the ultimate objective should always be to create sustainable places that rely on public and active transport infrastructure, the reality of most Australian cities is that the density of population and infrastructure networks is not sufficiently developed to support renewal without significant car parking, at least in the short term.

- Easy access from day one is absolutely critical to success.
- A mixed strategy of public transport and significant car parking is typically the best balance early in the life of waterfront precincts. This can be adjusted to be more public transport dominant as density and land values dictate.

Bassin 7, Aarhus, Denmark

Denmark is often voted one of the most liveable countries in the world. Aarhus Harbor Bath and adjacent Beach Bath in Aarhus, the country's second largest city, was created as one of the ways for the public to enjoy the water in all seasons. Swimmers can enjoy the circular diving pool, a children's pool, the 50m long lap pool or one of the two saunas that are tucked underneath the public boardwalk which doubles as a viewing platform.

Located in the Bassin 7 project, the ambition is to breathe new life into an abandoned industrial port and transform it into a modern residential neighbourhood. Between the curved esplanades are bathing areas, an open-air theatre, observation decks, cafes, and restaurants. These new public spaces are intertwined with dense mixed-use development along the water, connecting residents to the existing boat harbour and the nearby town square.

- > **Variety of swimming options available with man-made and river pools.**
- > **Social infrastructure supporting high-density residential neighbourhood**
- > **Bathing areas, an open-air theatre, observation decks, cafes, and restaurants**

Source: BIG



High Performance Places

Density and activity drive waterfront success

The spaces and linkages associated with the water are obviously the key experience of waterfronts. However, they are often unable to reach their full potential as active places for people unless the density of residential development and intensity of commercial uses is sufficient to bring them to life.

For many years the idea of 'commercialising' waterfronts has been politically unpopular, perceived by some as diminishing the public nature of these spaces. This could not be further from the truth. Urban life, exchange, interaction, choice, and true public life are the result of development density.

Of course, change is important too. A continual process of place management, tenant improvement and renewal is required to keep the 'mix' relevant and the public realm activated to the point that success is inevitable.

Waterfronts must work hard and, in many instances perform commercially to underpin their success.

Bassin de la Villette, Paris

In 2017, the City of Paris opened temporary floating pools in the Bassin de la Villette, after the waters were deemed clean enough for swimming following years of environmental reforms. This supervised bathing zone. The free-floating pools are made from modular floating cubes and consist of four pools of varying depths. Careful monitoring of water quality and a team of six lifeguards help keep visitors safe and the pools open for Parisians and visitors.

The Bassin de la Villette waterfront has become a fundamental part of Paris life. It is an example of how Paris has been determined to create a fulfilling social life for all its residents and visitors.

- > **Swimming pools and splash pads are a destination for visitors to cool off in summertime**
- > **Complementing these, pop-up bars and cafes offer food and games in colourful settings**
- > **There is even a beach, a novelty in the middle of Paris**

Source: Seine-Saint-Denis Tourisme



Lessons From Our Brisbane Study Tour

- Importance of long-term strategic plans coordinated across government.
- Importance of catchment-wide governance through the South East Queensland Organisation of Mayors.
- A strong embrace of resilience over retreat, activating flood affected riverfronts.





Urban River Management Across Australia

Urban river management across Australia differs widely due to varying governance structures, environmental challenges, and stakeholder engagement. Regions like South East Queensland (SEQ), Melbourne, Tasmania, and Sydney have distinct approaches, shaped by factors such as flood resilience, community access, and governance models.

A light beige map of Australia with state and territory boundaries. Four locations are marked with small white circles with dark outlines. The labels 'SEQ', 'Sydney', 'Melbourne', and 'Tasmania' are placed to the right of their respective markers. SEQ is on the northeast coast, Sydney is on the southeast coast, Melbourne is on the southern coast, and Tasmania is on the island to the south.

SEQ

Sydney

Melbourne

Tasmania

South East Queensland (SEQ)

In SEQ, the Council of Mayors leads river management through the Resilient Rivers Initiative, created after the devastating floods of 2011 and 2012. This collaboration between 11 councils focuses on improving flood resilience, reducing sediment runoff, and maintaining catchment health. Key stakeholders like Healthy Land & Water and the Queensland Government play critical roles in water quality improvement and sustainable water management.

The SEQ City Deal, a 20-year federal, state, and local partnership, provides significant funding to enhance water management and flood mitigation.

Tasmania

Tasmania's river management is more focused on conservation, with fewer urban pressures compared to other regions. The Department of Primary Industries, Parks, Water and Environment (DPIPWE) oversees major rivers like the Tamar and Derwent, working with local councils on environmental protection.

Programs such as the Tamar Estuary and Esk Rivers Program (TEER) focus on addressing sediment management and improving water quality, with involvement from non-profits like NRM North.

Melbourne

Melbourne Water governs the city's river systems, including the Yarra and Maribyrnong Rivers, under the principles of Integrated Water Management (IWM). This model fosters collaboration between state agencies like the Department of Environment, Land, Water and Planning (DELWP), local councils, and water utilities.

Melbourne's Yarra River Protection Act integrates water management with ecological and cultural priorities, with stakeholders such as the Yarra Riverkeeper Association working closely with the government to maintain river health.

Sydney

Sydney's river management is decentralised, involving numerous local councils and state agencies like Sydney Water and the NSW Department of Planning and Environment. This fragmented structure creates challenges in developing cohesive strategies for managing its rivers, including the Nepean–Hawkesbury, Parramatta and Georges Rivers.

Collaborative efforts like the Parramatta River Masterplan aim to improve water quality and access, but the lack of a unified authority and lack of consistent long-term funding complicates long-term planning and consistent water management.

Aligning Water and Land Use

We need to better align land use planning and catchment management. This could take the form of an Urban Rivers Act, Rivers Commissioner or simply greater powers to an existing agency like Sydney Water or the EPA. Any reform should include data collection, establishing water quality and safety standards, and ensuring that catchment authorities

The Commissioner could also serve as a bridge between local and state governments, fostering a compact that clearly outlines roles, decision-making processes, and long-term funding responsibilities.





Stormwater Challenges

If we want to make it safe for people to swim in urban rivers and project sensitive species and habitat in catchments we have to better manage our stormwater in NSW.

Effective stormwater management is crucial to achieving the goals of better connecting communities to waterways, as it directly impacts water quality, flood prevention, and ecosystem protection. Poor stormwater systems lead to runoff that pollutes rivers, contributes to erosion, and harms natural habitats. Implementing Water-Sensitive Urban Design (WSUD) solutions can mitigate these effects, helping manage stormwater sustainably.

A review of stormwater standards and levies should be considered to support long-term river projects. Improving basic stormwater standards would bring NSW into line with other states who have higher standards and achieve better water quality outcomes.

Adjusting levies could fund green infrastructure and ongoing maintenance, with accountability for both publicly managed and private assets via an auditing and compliance program embedded within local councils.

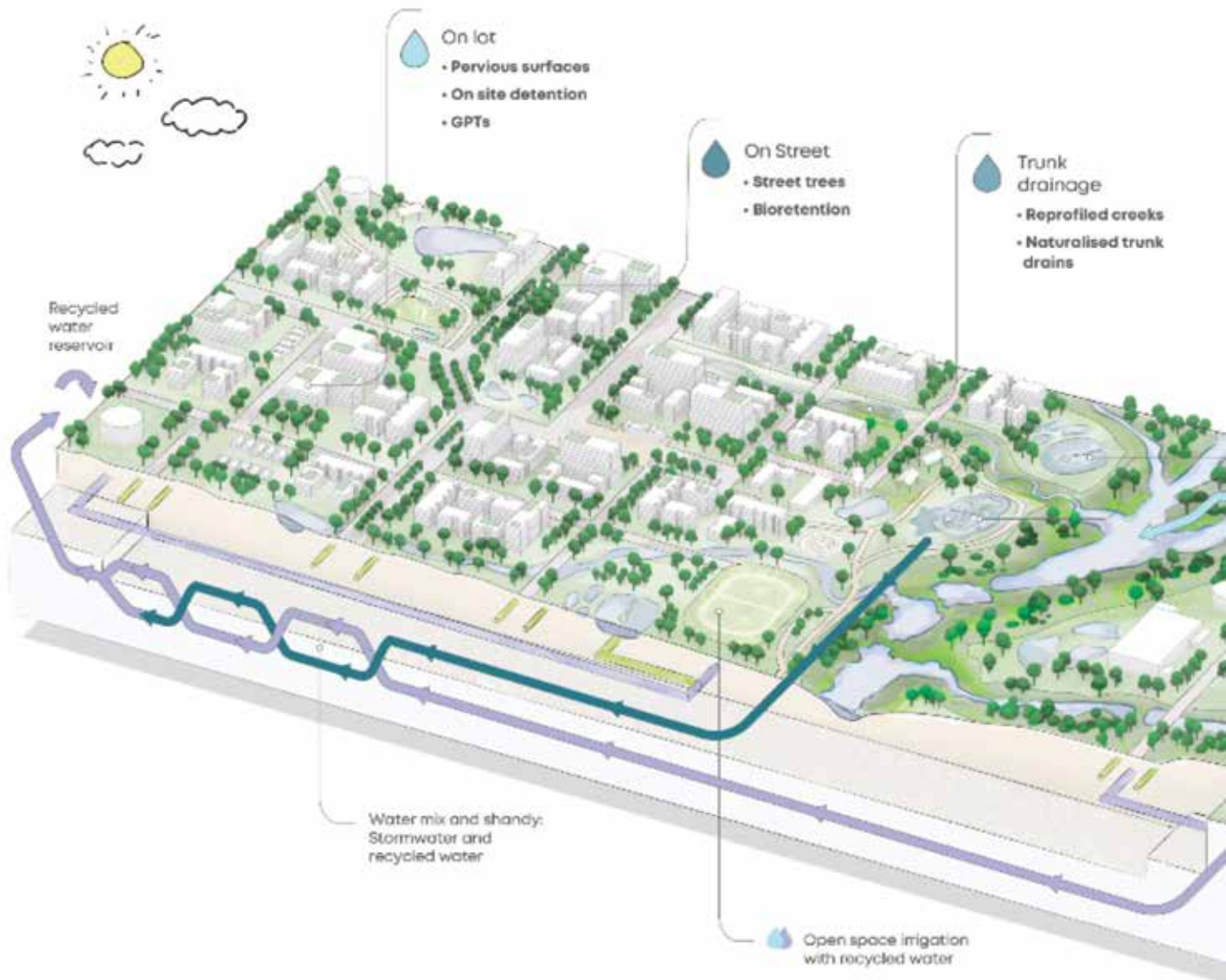
Desirable outcomes of such a review should be clear controls for adoption in LEPs and DCPs, council asset maintenance and management plans of stormwater assets and the proposed structure of the roles required to implement and follow through with this new approach.

Importantly, resources, funding maintenance and planning for new assets need to be supported by councils.





Stormwater Policy Suggestions





Source: Sydney Water

1. Policy issues

There is no overarching state-wide policy or legal commitment to sustainable integrated urban water management in NSW, leading to fragmented and inconsistent practices across local councils

2. Funding deficiencies

NSW lacks dedicated, long-term funding programs for transitioning to sustainable stormwater management. The existing stormwater service charge is insufficient and inconsistently applied.

3. Capacity building

There is a significant shortage of skilled professionals to design, implement, and maintain both conventional and Water Sensitive Urban Design (WSUD) systems. Additionally, NSW lacks formal capacity-building mechanisms and state-sanctioned guidelines for sustainable stormwater management.

4. Collaboration and leadership

Collaboration across different sectors is fragmented, and there is a need for stronger leadership from practitioners to advocate for sustainable stormwater practices.

5. Planning and management

Management practices vary widely between councils, often due to unrealistic infrastructure delivery expectations and a lack of life cycle planning for stormwater assets.

6. Opportunities and next steps

This report advocates for creating a more cohesive system through enhanced funding mechanisms, capacity building, collaborative frameworks, and stronger policy commitments. It calls for expanding professional and community engagement to address both environmental and community health through improved stormwater practices.

Flood Planning Policy

The current flood planning policy in New South Wales (NSW) plays a crucial role in guiding development near rivers and waterways. The policy is governed by the NSW Floodplain Development Manual, which emphasises a risk-based approach to development, and requires local councils to incorporate flood studies and flood risk management plans into their urban planning.

Key elements of the flood planning policy include:

- **Evacuation modelling:**
These models assess population density, road networks, and the capacity of emergency services, focusing on how quickly and efficiently residents can be evacuated during a flood.
- **Flood zoning restrictions:**
Areas deemed to be high-risk flood zones face significant restrictions, including limits on building residential or commercial structures, and guidelines requiring flood-resilient designs for those that do proceed. for those that do proceed.

Flood planning policies are essential for public safety; however, the Western Sydney Rivers Taskforce believes that in some precincts a better approach that balances flood risk management with responsible urban growth can be achieved.

Various NSW Government policies and inquiries, such as the O'Kane/Fuller Inquiry (2023), have called for more effective, contemporary flood planning controls. The government has developed the FEM2 Flood Evacuation Model, which highlights significant limitations in the evacuation network, particularly in Penrith, further complicating reasonable development efforts.

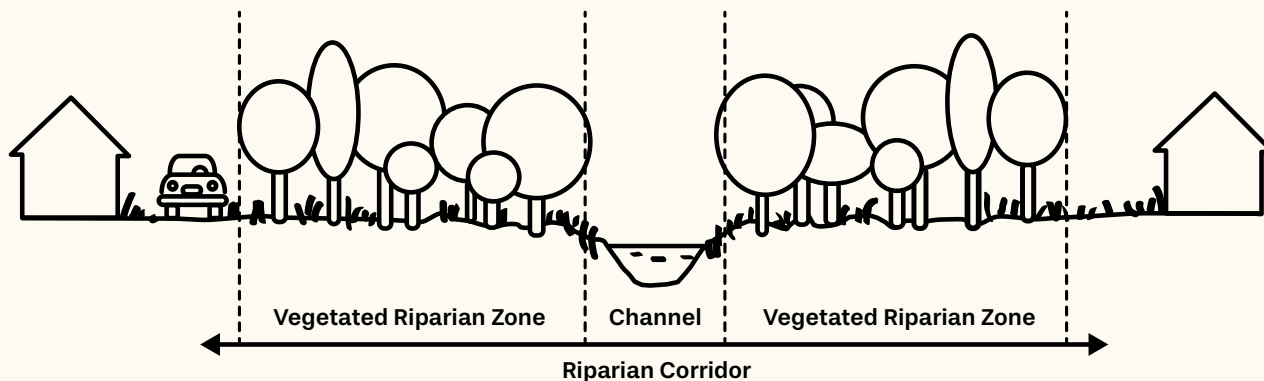
We call on the NSW Government to clarify flood planning policies, revisit assumptions in flood models and unlock development potential in areas like Penrith Lakes, Penrith CBD and Moore Point.



Riparian Zone Management

Planning regulations should focus on river-centred development by integrating riparian zone management with land-use planning. Riparian zones are vital for river health, acting as buffers that protect ecosystems and support sustainable urban growth. Updated guidelines will better define the interaction between land and waterways, preserving ecosystems while allowing responsible development.

In Brisbane, riparian zones are managed through strict planning regulations and vegetation management frameworks that protect riverbanks while accommodating urban expansion. In contrast, Sydney faces challenges due to fragmented land-use planning. Planning regulations for riparian zone management should be applied flexibly in urban centres so that new development may activate waterfront land, whilst sensitive ecosystems are protected.



Inflexibility of regulations relating to Riparian Land:

- Riparian and flood planning legislation and policies require large setbacks that are applied inflexibly.
- To minimise harm done to waterfront land, the impact of any proposed development activity must obtain a controlled activity approval from The Natural Resource Access Regulator (NRAR), the independent regulator of water activities
- NRAR has prepared a set of guidelines 'Guidelines for controlled activities on waterfront land – Riparian corridors' (Guidelines) to define riparian corridors. An average rule whereby encroachments into the riparian zone by development can be offset can apply in certain situations, however this is generally only acceptable for small encroachments, and not for city scale and urban activation.

Data-Driven Decision Making

Data collection and interpretation are essential for effective risk management, water safety, and liability mitigation. Reliable, real-time data on water quality, flood risks, and usage patterns can allow for precise, targeted interventions, particularly in flood-prone areas. Advanced technology platforms can enable continuous monitoring, providing early warnings for flood events and ensuring safer recreational conditions by detecting contamination in real time.

Historical data is equally critical, as it can help shape long-term strategies for river health and resilience. By analysing patterns over time, councils and authorities can better anticipate future challenges and make informed decisions about infrastructure investments. Moreover, data-driven insights can support compliance with regulatory standards, reducing legal exposure in cases of accidents or environmental damage.

As the region faces extreme weather events and mounting urban growth pressures, the use of integrated digital tools becomes increasingly vital. These platforms can streamline data collection and analysis while enabling collaboration between stakeholders, from local councils to developers, ensuring that river activation projects are both sustainable and adaptive in the face of changing conditions.



An aerial photograph of a riverbank. The river is on the left, with a concrete wall and a path leading along the bank. The bank is covered in lush green trees and grass. In the background, there are residential houses and a large green field. The sky is clear and blue.

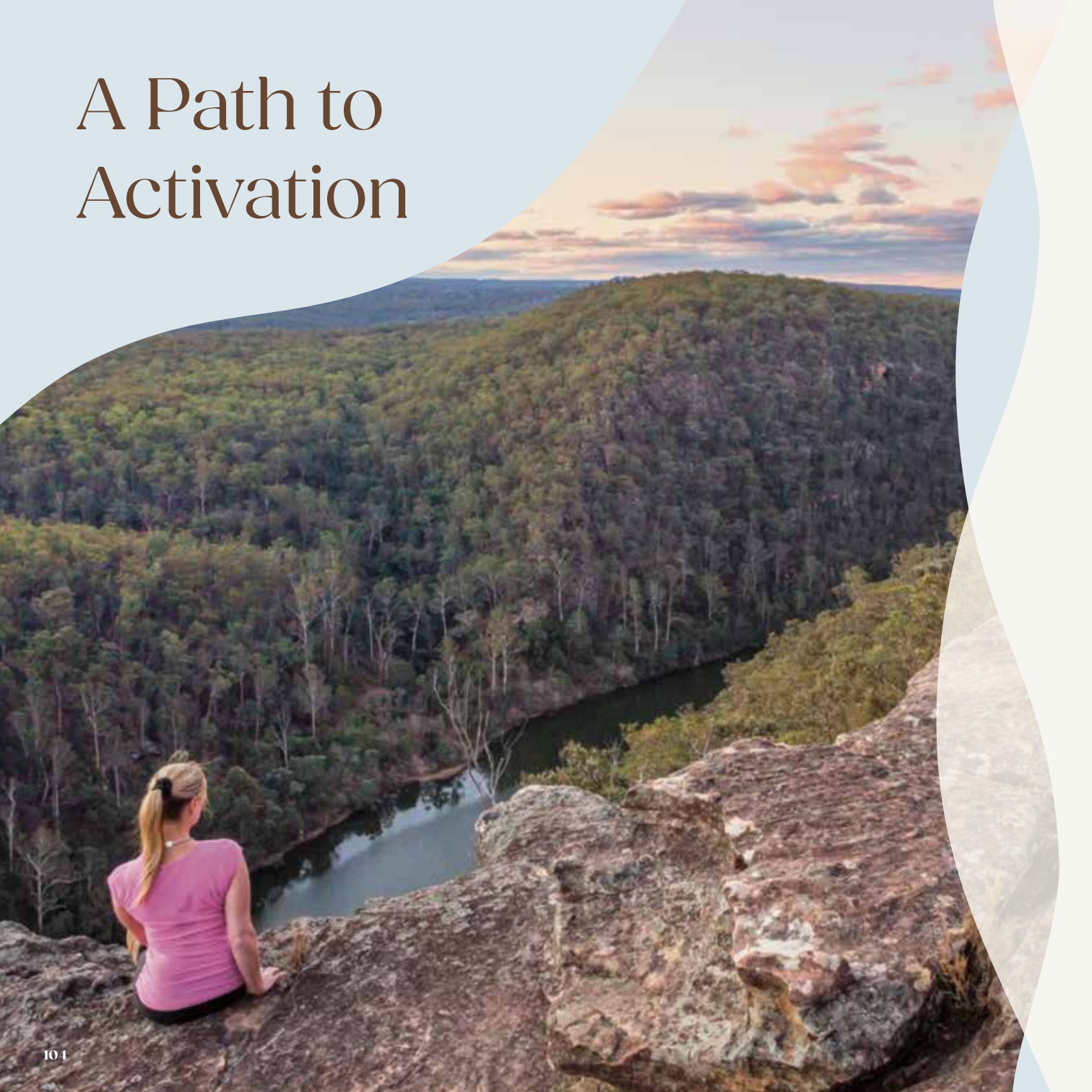
Funding Pathways

To support river-related projects, a long-term and sustainable funding model must be established.

Potential sources include:

- **State government commitment:**
A dedicated budget allocation could underpin major river projects.
- **Local rate 'river levy':**
Councils could impose a levy specifically to fund river development and maintenance.
- **Grants and developer contributions:**
Both public and private contributions could bridge funding gaps, while economic activities generated by these projects could provide further revenue streams.

A Path to Activation



Achieving river-connected communities requires the cooperation of local councils, state and federal governments, local businesses, and community groups. Our aspiration is clear: to transform how Western Sydney engages with its rivers and waterways – into hubs of activity, environmental stewardship, and vibrant activated living. Yet this vision can only be realised through a multi-layered, collaborative approach that places sustainability and community at its core.

Publicly declaring an intent to meet our Objectives will be crucial in setting the wheels of government and policy into motion. Such a commitment will be both a framework for action and a means of capturing the imagination of local communities and galvanising key stakeholders toward actionable outcomes that improve connections between Western Sydney's communities and its rivers.

Unlocking river-connected communities will require meaningful investment. The benefits – economically, environmentally, and socially – justify the costs. The challenge lies in navigating an extensive regulatory landscape, from catchment management authority frameworks to water quality regulations, as well as delivering robust business cases for these projects. On average, a river project can take up to five years from conception to completion, often due to the sheer number of regulatory steps and approvals involved. Specific challenges include current riparian management policies that are overly protective and disincentivise innovative uses of waterside lands.

The long-term management of river-connected communities requires defining roles and responsibilities among multiple stakeholders. These include local councils, the NSW Government, and catchment management groups. Clear agreements must be in place for ongoing financial responsibilities, particularly for water safety and infrastructure upkeep. Without sustainable management structures, these projects will struggle to deliver long-term benefits.

Integrating Water-Sensitive Urban Design (WSUD) into urban planning is essential for achieving the dual goals of sustainable land use and improved water quality. There is limited implementation of this new approach to thinking for new developments. This will need to change if river-connected communities are to thrive.

Recommendations

1. For the state government to broadly declare river health and water activation in Western Sydney is a priority, recognising the social, health and economic benefits of better connecting communities to their waterways.
2. The establishment of an 'Urban Rivers Taskforce', which brings together the leaders of relevant departments and agencies to support and possibly accelerate the NSW Water Quality Governance Roadmap.
3. Connecting with Country, finding ways to celebrate and manage our waterways with First Peoples.
4. Continued funding for 'Places to Swim' and the 'Urban Plunge' programs.
5. To prioritise the assessment of projects that activate Western Sydney waterways.
6. Consideration given to making Sydney Water more responsible for catchment coordination and management, like Melbourne Water.
7. Consideration for a small but ongoing catchment levy on council rates or water bills to support urban river management and activation.
8. Recognising the potential opportunities to work with Royal Life Saving to further increase swim education across Western Sydney.
9. Recognising the importance of rivers in strategic planning as Western Sydney continues to grow, at a district, council and precinct level.
10. To make sure blue infrastructure is eligible for State and Federal community grant programs; river activation, not just parks and gardens.
11. Building momentum – calendar of events e.g. community river festivals and the ICF Canoe Slalom World Championships in 2025, should be a priority of Destination NSW campaigns.
12. Consideration of a government partnership with the Western Sydney Rivers Taskforce to host quarterly forums with all stakeholders to maintain the focus of activating urban waterways.



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