Parramatta River Recreational Water Quality Report

Parramatta River Catchment Group

Sydney WATER

RIVER WATCH

Recognition of the River's Traditional Custodians

We acknowledge the Traditional Custodians of the land and waterways within the Parramatta River catchment and extend our deepest respects to their Elders, both past and present.

We recognise and honour the rich and enduring cultures, beliefs, and traditions of First Nations peoples, who have maintained a profound connection to Country for thousands of years. Their knowledge and wisdom are invaluable to improving the health of this land and its waterways.

We celebrate the ongoing contributions of First Nations communities to the cultural and social fabric of our region. Their insights and practices play a crucial role in enhancing our understanding of sustainability and environmental stewardship.

This land is, was, and always will be Aboriginal land. We are committed to fostering respectful relationships that honour this legacy and support the ongoing vitality of First Nations cultures.

Illustrations created by Leanne Watson Redpath

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Foreword from the PRCG

The Parramatta River has long been at the heart of our communities, and for more than 10 years, the Parramatta River Catchment Group (PRCG) and its member organisations have worked tirelessly to reconnect people with this vital waterway.

By bringing together councils, state government organisations, and community groups, we have shown that collaboration, creativity, and shared purpose can achieve real improvements in river health, while creating inviting, natural spaces for everyone to enjoy.

A vital part of this success has been the partnership with Sydney Water, whose innovative, science-led approach to water quality monitoring and predictive modelling, through the RiverWatch® program, has guided the safe activation of new swim sites.

These combined efforts have enabled us to achieve a major milestone: delivering our Masterplan goal of three new public swim sites by 2025 – reconnecting the community with the river's swimming heritage and supporting thriving ecosystems.

Looking ahead, the PRCG is excited to expand safe swimming opportunities along the river and focus on improving the health of its creeks and tributaries, recognising that healthy waterways are central to creating more liveable, resilient communities. I warmly encourage everyone to join us in caring for and celebrating this extraordinary waterway.

Councillor Penny Pedersen
Chairperson
Parramatta River Catchment Group

Foreword from Sydney Water

Sydney Water has been a proud member of the Parramatta River Catchment Group since 2008. Since 2019, we have overseen the delivery of the Parramatta River Masterplan in partnership with the PRCG and its members. Central to the Masterplan is the mission to return swimming to the Parramatta River.

To support this mission, Sydney Water developed RiverWatch®, a water quality monitoring service for aquatic recreation. RiverWatch provides specialist testing and analysis to ensure new swim sites meet national water quality guidelines. We have also developed RiverWatch predictive models to report water quality online, so users know when and where it is safe to swim.

Better regulation and management over recent decades have greatly improved the river's health. Through the PRCG's leadership and the work of its partners, with swimming as a key catalyst, water quality improvements have continued to progress

Sydney Water has been at the forefront of this change, investing heavily in wastewater and stormwater networks to improve waterway health and support swimming, now and into the future.

We recognise that caring for our waterways is a shared responsibility and look forward to continuing our partnership with the PRCG to create a healthy, thriving Parramatta River.

Paul Higham
Head of Business Development
Sydney Water

1. Introduction

Running through the geographic heart of Sydney, the Parramatta River stretches from Blacktown in the west to the iconic Sydney Harbour in the east. It is home to one of Australia's fastest growing regions, with over 1.8 million people living within its catchment area.

Since its formation in 2008, the Parramatta River Catchment Group (PRCG) has been committed to restoring and protecting the health of the Parramatta River.[1] In 2018, the PRCG released *DUBA, BUDU, BARRA: Ten Steps to a Living River – the Parramatta River Masterplan*, with a mission to make the river swimmable again.[2]

The focus on a swimmable river goes beyond simply creating places to swim. It represents cleaner water, healthier ecosystems, and a deeper connection between community and the river.

As part of this mission, the PRCG committed to opening three new swim sites along the Parramatta River by 2025 – an ambitious target that has now been fully realised. Bayview Park Baths opened in November 2022, followed by Putney Beach in January 2025 and, most recently, Bedlam Bay in November 2025.

Community consultation revealed that uncertainty around water quality was a key barrier to river swimming. The community indicated they would feel more confident if a credible authority regularly advised when conditions were safe to swim.

To address this need, the Masterplan called for a dedicated water quality monitoring program to support the safe activation and management of new sites, and to communicate water quality conditions to the community.

Sydney Water was appointed to lead this step, resulting in the creation of the RiverWatch® monitoring program. Designed specifically for activating new swim sites along the Parramatta River, it complements the NSW Government's Beachwatch program while providing a tailored approach for estuarine conditions.

[1] Parramatta River Catchment Group (PRCG), Our Living River home page (2025), https://www.ourlivingriver.com.au/

[2] *PRCG, DUBA, BUDU, BARRA: Ten Steps to a Living River – The Parramatta River Masterplan (2018)*, https://www.ourlivingriver.com.au/our-plan/parramatta-river-masterplan/

2. The story of water quality and swimming in the Parramatta River

The Parramatta River has long been a lifeblood of Sydney, cared for by the Dharug people for over 30,000 years. The river and its surrounding lands were central to them for food, community, and culture.

European colonisation brought rapid change. The river's fertile banks attracted early colonial farmers and later became a popular swimming destination, with 22 baths built between 1880 and 1930.

As population, industry, and foreshore development grew, pollution took a severe toll. By the 1960s, water quality had declined so significantly that swimming was no longer safe, leading to widespread closures of swim sites.

By the late 20th century, conditions began to improve through stronger environmental laws, the relocation of riverside industries, and major investment in remediation.

In 2008, the Parramatta River Catchment Group was established – an alliance of councils, state government organisations, and community groups committed to restoring and protecting the Parramatta River.

Released in 2018, the Parramatta River Masterplan has guided efforts to improve water quality and ecological health, supporting the opening of four new swim sites across the catchment.

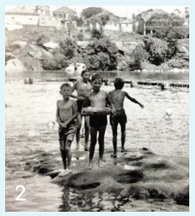
Pre-1788
First Nations people care for the land and waterways for over 30,000 years. European colonisation starts in 1788.


1

1791
River modification begins, including planting of vineyards, citrus trees, and other plants along the riverine landscape.

1830s
Wetlands along the Parramatta River are drained and filled to create firm and arable land.

1830
The first ferry services begin, often ending at Rydalmere. Services to Parramatta stop in 1928 due to siltation.


2

1850s
Parramatta becomes a major metropolis, serving as a key hub for trade, governance, and regional growth.


5

1880–1930s
22 swimming baths open along the Parramatta River. Rowing and sailing events draw thousands of spectators.

Early 1900s
Industrialisation leads to increasing illegal dumping of soil and rubbish into the river.

1960s
Water quality declines to unsafe levels, leading to the closure of most river swimming baths.

1970
Clean Waters Act introduced to improve water quality, prompting river improvement plans and the relocation of waterfront factories.


6

1989
Beachwatch is established due to public concern over sewage at Sydney's ocean beaches.

1989–1994
Clean Waterways Program provides improvements in waterway investment and coordination.

2005
Upper Parramatta River Catchment Trust resolves critical flooding issues and progresses plans for Lake Parramatta swim site.

2006
Commercial fishing banned west of the Sydney Harbour Bridge due to heavy metal contamination in fish.


4

2018
Launch of the Parramatta River Masterplan, *Duba, Budu, Burra – ten steps to a living river* at the 21st International River Symposium.

2022
Bayview Park Baths in Concord is launched – the first swim site on the river estuary to open in more than 50 years.


3

2025
Putney Beach and Bedlam Bay swim site are launched. Callan Park, Mort Bay, and Cockatoo Island sites being explored.

2019
Sydney Water develops the RiverWatch® program to monitor water quality in the Parramatta River.

2015
Lake Parramatta officially reopens for swimming after 72 years, drawing over 12,000 visitors in its first summer season.

2008
Parramatta River Catchment Group is established to help restore and protect waterway health.

2006
Stormwater Management Service Charge introduced to fund extra stormwater management services in eligible areas.

Early 1990s
The upper Parramatta River is dredged for ferry access. Rivercat service begins in 1993.

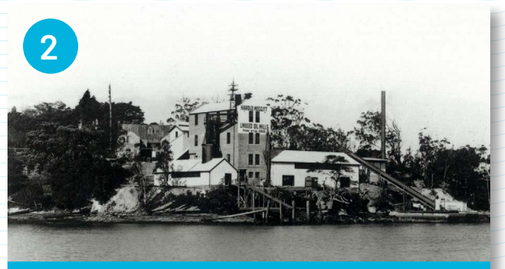
Images this page: 1. Aboriginal fish traps, King George Park, Rozelle; 2. The Glades Bay Baths, 1951 (Ryde Library and Information Services); 3. Bayview Park Baths, Concord; 4. Lake Parramatta opening, 2015.

Images this page: 5. Old Government House, Parramatta Park; 6. Nestlé's Company factory, Abbotsford, Parramatta River (A.G. Foster collection).

2. The journey to improve water quality in the Parramatta River

The return of swimming to the Parramatta River is the result of decades of collaboration and commitment from many stakeholders. Once heavily impacted by industrial activity, the river's revival reflects the PRCG's clear mission to restore the catchment, Sydney Water's technical expertise in water quality and infrastructure, and the strong leadership of local councils in creating new, safe places for the community to swim. Together, these partners have transformed long-term planning into real progress, delivering new swim sites, improving river health, and reconnecting people with a waterway that has shaped the region's identity for generations. As water quality continues to improve, the Parramatta River will become an even more valued part of life in Western Sydney and a sanctuary for wildlife to flourish.

Most former swim sites along the Parramatta River were closed by the 1960s due to pollution.



River health improves due to relocation of riverside industries, better regulation, and coordination, making swimming possible again in some locations.

Water quality experts in government, universities, and the private sector work together to ensure new sites can be safely activated.

Sydney Water completes works from 2020 to 2024 that prevent around 1,500 mL of wastewater (equivalent to 600 Olympic-sized swimming pools) from overflowing into the river each year during rainfall.

Three new swim sites on the Parramatta River are opened by 2025 – Bayview Park Baths, Putney Beach, and Bedlam Bay – achieving the PRCG's Masterplan goal for a swimmable river.

Climate change and expanding urban development will continue to challenge efforts to protect and enhance the health of the Parramatta River.

More than 1,000 RiverWatch samples are collected at planned swim sites between 2020 and 2025, building a strong evidence base to assess and improve river health.

RiverWatch modelling provides water quality predictions in 'real time,' giving the community clear guidance on when it is safe to swim.

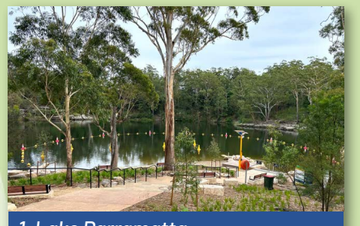
Images:

1. *View of bathers on constructed stone edge of Lake Parramatta, late 1930s (City of Parramatta Heritage Collections Services).*
2. *Rockend Cottage and Harold Meggitts linseed oil mill, Gladesville, around 1924 (City of Ryde).*
3. *Water chemistry analysis at Sydney Water's NATA accredited labs.*
4. *Sewer overflow (courtesy of Paul and Ann Thorton).*
5. *Sydney Water water quality sampling.*
6. *Putney Beach launch, 2025 (City of Ryde).*
7. *Bayview Park Baths, Concord.*
8. *Urban flooding.*

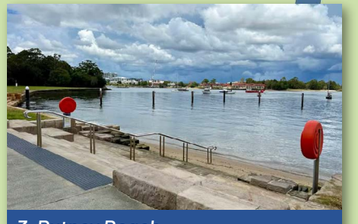
4. Parramatta River swimming and foreshore recreation sites


7. Chiswick Baths

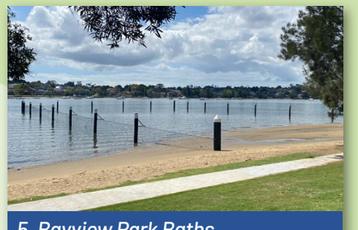

9. Dawn Fraser Baths

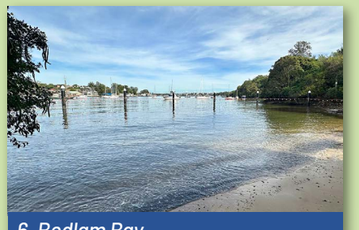

1. Lake Parramatta


2. McIlwaine Park


3. Putney Beach


4. Cabarita Park beach


5. Bayview Park Baths


6. Bedlam Bay

Dundas Valley
North Parramatta
Telopea
Denistone
Ermington
West Ryde
Parramatta
Rosehill
Putney
Sydney Olympic Park
Granville
Silverwater
Gladesville
Hunters Hill
Concord
Chiswick
Burwood
Balmain
Leichhardt

Existing swim sites
- 1. Lake Parramatta
- 3. Putney Park
- 4. Cabarita Park beach
- 5. Bayview Park Baths
- 6. Bedlam Bay
- 7. Chiswick Baths
- 9. Dawn Fraser Baths

Proposed swim sites
- 8. Callan Park
- 10. Cockatoo Island
- 11. Mort Bay

Foreshore recreation sites
- 2. McIlwaine Park

Updated: December 2025

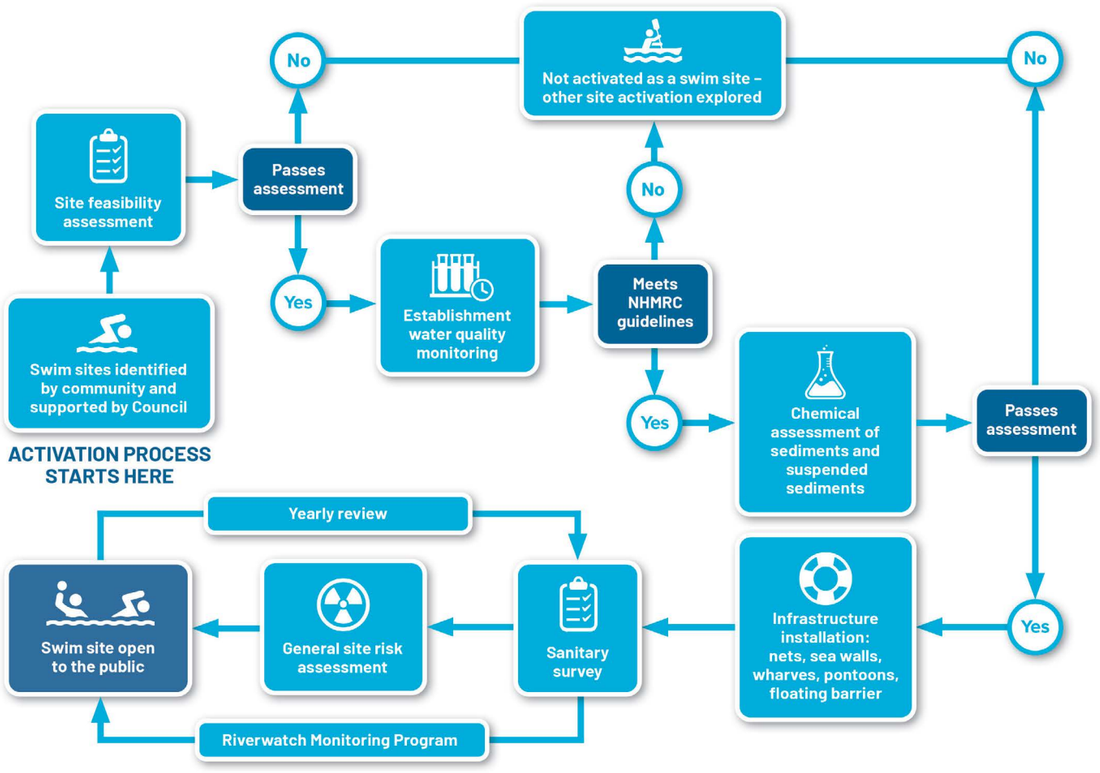
5. How new sites are assessed

Before a potential site can progress, it must be thoroughly assessed using the Swim Site Activation Framework, developed specifically for new swim sites on the Parramatta River. The process follows the National Health and Medical Research Council's (NHMRC) *Guidelines for Managing Risks in Recreational Waters (2008)*[3].

While water quality plays a key role in determining whether a site is suitable for swimming, other factors are also considered including access, physical hazards, presence of wildlife, cultural considerations, potential impacts from legacy contamination, and overall user safety. A swim site only opens if these risks have been assessed and, where necessary, appropriate management controls are put in place.

To find out more about our assessment processes, refer to the RiverWatch Swim Site Activation Fact Sheet[4].

Parramatta River Swim Site Activation Flow Chart



[3] National Health and Medical Research Council (NHMRC), Guidelines for Managing Risks in Recreational Water (2008), https://www.nhmrc.gov.au/about-us/publications/guidelines-managing-risks-recreational-water

[4] Sydney Water, Urban Plunge Fact Sheet: RiverWatch Swim Site Activation (2022) https://urbanplunge.sydneywater.com.au/content/dam/sydneywater/urban-plunge/documents/Riverwatch%20Swim%20Site%20Activation%20fact%20sheet.pdf

5.1 A snapshot of new swim sites on the Parramatta River

Site name	Waterbody type	Monitored since	Has the site passed water quality testing?	Has the site passed chemical testing?	Is it safe to swim in dry weather?*	Is a water quality prediction available?
Bayview Park Baths (City of Canada Bay)	Estuary	2019	✓	✓	✓	✓
Putney Beach (City of Ryde)	Estuary	2019	✓	✓	✓	✓
Bedlam Bay (Hunters Hill Council)	Estuary	2020	✓	✓	✓	✓

**Refer to Section 5.4 for further information.*

Water quality sampling, Canada Bay.

5.2 How do we monitor water quality?

Water quality is a key component in determining whether a site is suitable for swimming. All new swim sites go through multiple phases of water quality monitoring and assessment before they can open. Monitoring also continues after the site is open, allowing us to understand water quality trends and ensure that it remains suitable for swimming.

In the past five years, over 1,000 RiverWatch samples have been taken in the Parramatta River.[5]

The RiverWatch monitoring program follows the NHMRC *Guidelines for Managing Risks in Recreational Waters (2008)* and the *NSW Water Quality Objectives*.[3,6] You can read more about our RiverWatch monitoring program and the parameters included in our program in this fact sheet.[7]

RiverWatch samples are sent to Sydney Water's National Association of Testing Authorities (NATA) accredited laboratory for analysis. We monitor the presence of enterococci bacteria (a faecal indicator bacteria) to check that the levels meet the guidelines.

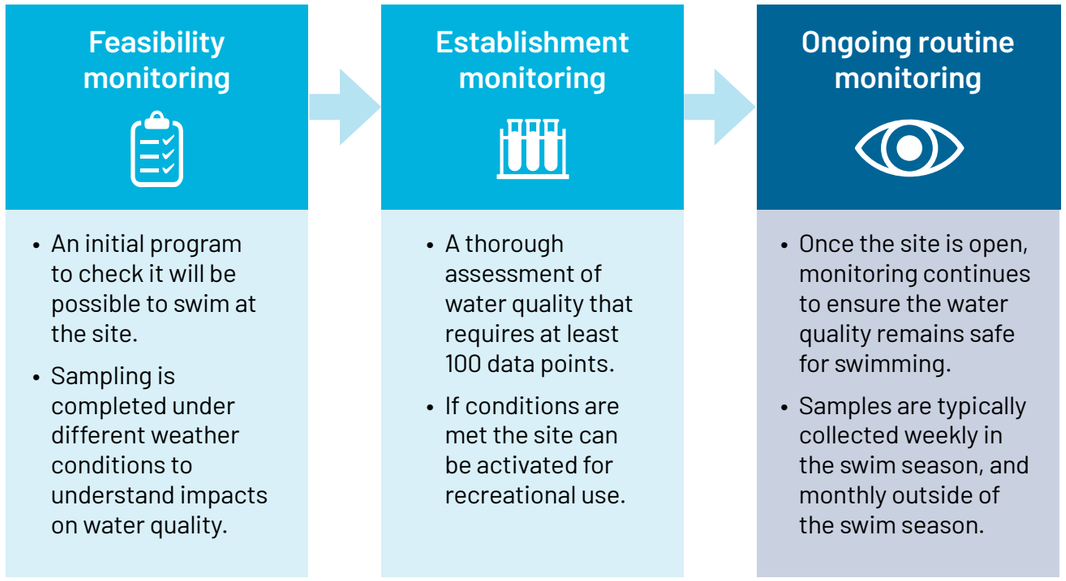


Figure 1: Graphic demonstrating the different phase of water quality monitoring that each RiverWatch site goes through. The light blue phases indicate monitoring before the site opens whereas the dark blue shows monitoring after the site is open.

[5]Refers to all RiverWatch samples taken at Bayview Park, Putney Beach, and Bedlam Bay from January 2020 to October 2025, including targeted samples to understand site recovery after rain.

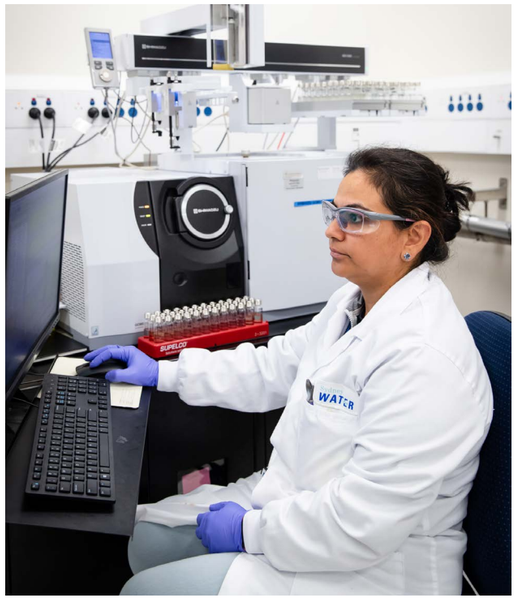
[6]NSW Government, NSW Water Quality and River Flow Objectives: Sydney Harbour and Parramatta River Water Quality Objectives Explained (2006), https://www.environment.nsw.gov.au/ieo/SydneyHarbour/report-03.htm#P472_36586

[7]Sydney Water, Urban Plunge Fact Sheet: RiverWatch Water Quality Monitoring Program (2022) https://urbanplunge.sydneywater.com.au/content/dam/sydneywater/urban-plunge/documents/Riverwatch%20Water%20Quality%20Monitoring%20fact%20sheet.pdf

5.3 How is long-term water quality assessed?

The NHMRC guidelines outline a process to assess microbial recreational water quality. This includes two separate assessments that are combined to produce an overall grade. This gives a long-term assessment of a site's water quality as opposed to what water quality was like on a particular day. We use these results to assess the suitability of a site for swimming.

Water quality assessments are completed before the site opens, and repeated every year so that we can understand trends in the data. One part of the assessment, the sanitary inspection category, typically produces the same grade each year, as it assesses surrounding site risks. This grade would only vary year on year if there were major infrastructure or urban development changes nearby that could impact water quality at the swim site. The other part of the assessment, the microbial assessment category, is based directly on results from water quality sampling and could change between assessments.



Water chemistry analysis at Sydney Water's NATA accredited labs.

The site is assessed to consider any potential pathogen sources that could impact the swim site. This includes toilet facilities, wildlife, and bathers themselves, as well as upstream sources, such as stormwater and wastewater infrastructure. The grades range from Very Low Risk to Very High Risk.

The enterococci results from over 100 water quality samples, taken at the site over the past five years, are combined to produce a 95th percentile. This tells us what the water quality is like 95% of the time. The result is compared to graded categories in the guidelines. The grades range from A to D.

Using a matrix designed by the NHMRC, the sanitary inspection and microbial assessment categories are combined to produce an overall suitability grade. Each grade describes how suitable the site is for swimming. The grades range from Very Good to Very Poor.

Figure 3: The NHMRC process to assess water quality for recreational waterways (NHMRC, 2008).

5.4 What is the overall suitability grade?

The sanitary inspection category and microbial assessment category are combined to produce an overall suitability grade. To calculate the microbial assessment category, all routine water samples, including those taken on both sunny and rainy days are considered. For the three new sites, all routine samples resulted in a Grade C, which gives an overall suitability grade of 'Poor'.

Importantly, a 'Poor' grade doesn't mean the site is unsafe for swimming – it simply means swimming should be avoided after wet weather. To keep the community informed on changing water quality conditions, predictive modelling for each site enables swimmers to understand when it is safe to swim.

To better understand water quality during dry weather, when people are most likely to swim at the site, we also analyse water quality results with wet weather samples excluded. When this approach is used, all three sites achieved a Grade B, which gives an overall rating of 'Good'. This provides further clarity that the site is suitable for swimming in dry weather.

Sites on the river score a 'moderate risk' sanitary inspection because they are located on a river, not the coast. Due to the way the NHMRC classification matrix is designed, sites with a 'moderate risk' sanitary inspection grade can only be rated as 'Poor' or 'Good' for suitability — they're not eligible for a 'Fair' grade. This means the difference between 'Poor' and 'Good' suitability grade isn't as significant as it may seem.

Microscopy analysis at Sydney Water's NATA accredited labs.

		Microbial water quality assessment category (95th percentiles – intestinal enterococci/100mL				Exceptional circumstances
		A ≤ 40	B 41-200	C 201-500	D > 500	
Sanitary inspection category (Susceptibility to faecal influence)	Very low	Very good	Very good	Follow up	Follow up	ACTION
	Low	Very good	Good	Follow up	Follow up	
	Moderate	Good	Good	Poor	Poor	
	High	Good	Fair	Poor	Very poor	
	Very high	Follow up	Fair	Poor	Very poor	
	Exceptional circumstances	ACTION				

Figure 4: Classification matrix for determining the Overall Suitability Grade (NHMRC, 2008)

Suitability Grade	Description
Very Good	Location has generally excellent microbial water quality and very few potential sources of faecal pollution. Water is considered suitable for swimming almost all of the time.
Good	Location has generally good microbial water quality and water is considered suitable for swimming most of the time. Swimming should be avoided during and for up to one day following heavy rain at ocean beaches and up to 3 days at estuarine sites.
Fair	Microbial water quality is generally suitable for swimming, but because of the presence of significant sources of faecal contamination, extra care should be taken to avoid swimming during and for up to 3 days following rainfall or if there are signs of pollution such as discoloured water, odour, or debris in the water.
Poor	Location is susceptible to faecal pollution and microbial water quality is not always suitable for swimming. During dry weather conditions, ensure that the swimming location is free of signs of pollution, such as discoloured water, odour, or debris in the water, and avoid swimming at all times during and for up to 3 days following rainfall.
Very Poor	Location is very susceptible to faecal pollution and microbial water quality may often be unsuitable for swimming. It is generally recommended to avoid swimming at these sites almost all of the time.
Follow Up	Sometimes a location's sanitary inspection and water quality data produce incongruent results. These locations are classified as 'Follow Up'. Further assessment will be required to obtain the necessary data to provide a definite classification in accordance with national guidelines.

Figure 5: Descriptions of each Overall Suitability Grade, sourced from NSW Government, Beachwatch, State of the Beaches Report 2023-2024.

5.5 How does rainfall impact swimming?

Wet weather is the most significant factor affecting water quality and whether it is possible to swim. Rainfall causes stormwater runoff which carries litter, oils, and other pollutants from roads and public spaces into the river. Heavy rain can also overwhelm the wastewater network, leading to diluted wastewater overflows. For these reasons, swimming is not recommended for up to three days after rain.

Rainfall patterns in Sydney have altered in recent years. In 2022, the city experienced its wettest year on record, driven by persistent La Niña conditions. High intensity rainfall events have become more frequent, alongside extended periods of light rainfall. While these weather conditions affect water quality across the Parramatta River catchment, the swim sites remain suitable for swimming in dry weather conditions.

5.6 What about chemical contaminants?

We know that some areas of the Parramatta River contain legacy chemical contamination from historic industrial land uses and poor waste practices.

To ensure new swim sites pose no risk to public health, Sydney Water, University of NSW (UNSW), the NSW Environment Protection Authority (EPA), Department of Planning and Environment (DPE), NSW Health, and councils worked with specialist consultants Environmental Risk Sciences (EnRiskS) to develop a Human Health Risk Assessment framework to guide safe site activation.

Human Health Risk Assessments were completed for Bedlam Bay, Putney Beach, and Bayview Park Baths, confirming that chemical contaminants present no risks of concern for the proposed recreational uses at any of these sites.

Further information can be found in the RiverWatch Chemical Assessment Program fact sheet.[8]

Sediment sample testing, Canada Bay.

[8]Sydney Water, Urban Plunge Fact Sheet: RiverWatch Chemical Assessment Program (2022) https://urbanplunge.sydneywater.com.au/content/dam/sydneywater/urban-plunge/documents/RiverWatch%20Chemical%20Assessment%20Program%20fact%20sheet.pdf

5.7 How do we keep you informed about water quality?

We know that the community wants to understand water quality in the river, before going for a swim. As an urban river, water quality can fluctuate, especially after wet weather. That is why, as a general rule, we advise not swimming for up to three days after rain.

Traditional water quality sampling and reporting has limitations, as there can be a delay of up to three days between sample collection and results. This is due to the time needed to culture and analyse microbial bacteria concentrations.

To give users more accurate information about water quality at swim sites, we developed the RiverWatch® predictive models. These enable swimmers to access 'real time' water quality predictions, so they can understand when and where it is safe to swim. These methods are supported by both the World Health Organization and the NHMRC.

The models gives tailored predictions for each swim site, reported through the PRCG's Our Living River website and Sydney Water's Urban Plunge website. QR signage at designated swim sites also provides access to water quality predictions.

5.3.1 RiverWatch Predictive Models

Sydney Water's RiverWatch predictive models, developed in partnership with the UNSW, are tailored to estuarine swim sites in the Parramatta River.

Using rainfall and other environmental factors, the models predict microbial pollution levels. As more samples are collected, the models' accuracy will improve over time.

Water quality predictions are updated four times daily and publicly available on the PRCG Our Living River website and Sydney Water's Urban Plunge website. They are reported using the following categories:

Figure 2: The water quality predictions shared by the RiverWatch model.

More information on the RiverWatch predictive model is available in the fact sheet.[9]

[9]Sydney Water, Urban Plunge Fact Sheet: Predictive Model (2022) https://urbanplunge.sydneywater.com.au/content/dam/sydneywater/urban-plunge/documents/Riverwatch%20Predictive%20Model%20fact%20sheet_online.pdf

6. Activating waterways for foreshore recreation

In some cases, sites may not be suitable for in-water recreation, but they still offer great opportunities to enjoy and experience the river from the foreshore.

6.1 Case Study: McIlwaine Park, Rhodes, City of Canada Bay

Located in Brays Bay, this vibrant foreshore park offers a welcoming space for families and visitors, featuring discovery rockpools to explore the aquatic environment and a small man-made beach for children's play and river views.

Identified as an activation site in the Parramatta River Masterplan, McIlwaine Park underwent an $8.7 million upgrade in 2023, delivering a new sandy beach, sandstone seawall, tidal plantings, improved lighting, and inviting picnic areas.

The project has created safer, more natural river edges and introduced an accessible foreshore pathway leading to the upgraded beach play area with expansive outlooks across the water.

Today, visitors can connect with the Parramatta River in richer, more immersive ways, from observing marine life in the rockpools and Living Seawall tiles, to appreciating the protected saltmarsh area that helps support local ecosystems.

Before and after photos of McIlwaine Park.

6.2 What about other swim sites on the Parramatta River?

Beachwatch also monitors recreational water quality at a number of additional sites on the Parramatta River, at Chiswick Baths, Cabarita Beach, and Dawn Fraser Baths. Beachwatch issues daily pollution forecasts to enable swimmers to make informed decisions about where and when to swim. The forecasts are available from 6:00 am and updated during the day if conditions change. Beach pollution forecasts can be accessed via the Beachwatch website, email subscription, and social media platforms.

7. The state of the river

Returning swimming to the river has been enabled by the substantial collaborative efforts and investment of many organisations and individuals over several years. Continuing this work is essential to ensure waterway health improves further and recreation outcomes are protected into the future.

7.1 Water quality improvements

The health of the Parramatta River is steadily improving thanks to the coordinated efforts of member organisations and the community. Sydney Water and councils remove vast quantities of litter and sediment across the catchment through gross pollutant traps (GPTs) and other pollution control devices, while education and compliance programs, like *Get the Site Right*, target poor erosion and sediment control on construction sites, helping reduce sediment, nutrients, and other pollutants from entering the river. Meanwhile, NSW Maritime Services work to remove large debris from the Parramatta River and are also tackling the removal of smaller litter items in hard-to-reach foreshore areas.

Between 2020 and 2024, Sydney Water invested approximately $71.6 million in a source control program across the upper and mid Parramatta River catchments. The program has improved the wastewater network and reduced the volume of stormwater entering the wastewater network, reducing the likelihood of overflows during wet weather and directly supporting swimming outcomes.

Milson Park wetland, Westmead

Collaboration in action: Milson Park wetland

In 2023 Sydney Water delivered Milson Park wetland at Westmead, in partnership with the City of Parramatta. The $16 million project created wetlands that are designed to naturally treat stormwater and improve water quality before it reaches the Parramatta River. The system also includes two gross pollutant traps that prevent over 13,000 kilograms of litter from entering the river, annually.

The Milson Park wetland provides a natural, welcoming space for the community and expanded habitat for wildlife, supported by over 42,000 additional native plants. New amenities and signage encourage people to engage with the waterway and learn about the wetlands system. Community use has increased significantly, with cyclist numbers doubling and pedestrian activity rising by 44% within months of opening.

New housing development in Sydney

7.2 Future challenges

Protecting water quality in the Parramatta River isn't just about managing historical issues, but also understanding future challenges to the river's health to ensure we can protect the river for generations to come. Increasing urban development and more extreme weather events due to climate change will continue to place pressure on waterways across the catchment.

7.2.1 Climate change

Across metropolitan Sydney, average temperatures are projected to rise between 1.2°C under a low emissions scenario and around 3.4°C under a high emissions scenario.[10] As heatwaves become more frequent and intense, the Parramatta River will become an increasingly valuable place for community to cool down – emphasising the importance of maintaining a healthy river.

Warming temperatures bring more than just heat. A warmer atmosphere can hold 7% more moisture for every degree of warming, which means more intense rainfall and storms. These extreme weather events will cause more stormwater runoff and riverbank erosion, and put extra pressure on the wastewater system, all of which increase the risk of pollutants in the river. Climate patterns like La Niña and El Niño are also expected to become more unpredictable, compounding these challenges.

Sea level rise presents another significant challenge. By 2090, metropolitan Sydney could see increases of up to 56 centimetres, affecting plant and wildlife health through changing salinity and placing additional pressure on stormwater and wastewater systems, particularly during high tides and storm surges.

7.2.2 Increasing land use pressures

A growing population will increase reliance on the Parramatta River for liveability in the future, while increasing development will place additional pressure on the river's health. Without reforms to land-use planning and improved stormwater management, rising development pressures will continue to harm the river's water quality.

As urban density and population grows, more hard surfaces will lead to greater volumes of stormwater runoff that carry litter, heavy metals, oils, and nutrients into the river. Construction site runoff and erosion can introduce sediment and contaminants, degrading water clarity and aquatic habitats. Increasing stormwater volumes also impact the wastewater network, elevating the risk of wet weather overflows.

Further work is required to improve stormwater management in new development to protect the river and the swimming outcome into the future.

[10]NSW Government, Department of Climate Change, Energy, the Environment and Water (DCCEEW), *Metropolitan Sydney – Climate Change Snapshot (2024)*, https://www.climatechange.environment.nsw.gov.au/sites/default/files/2024-08/NARCliM2-Snapshot-Sydney.pdf

8. Our river, our responsibility

A decade after launching the *Our Living River* initiative and the mission to make the river swimmable again, the Parramatta River Catchment Group has successfully reconnected the community with the river's history as a place for swimming, recreation, and social connection.

The work of the PRCG and its member organisations demonstrates that collaboration and innovation can deliver meaningful improvements to river health, while also supporting the creation of cool, natural spaces for the community to relax, explore, and fully enjoy.

Sydney Water has led a science-based approach to water quality monitoring and predictive modelling, aligned with targeted site assessments and community engagement by councils and the PRCG to open swim sites. Its RiverWatch® program continues to monitor water quality at these locations.

These ongoing efforts not only support safe swimming but also enhance habitat for the many species of wildlife that rely on the river and its creeks.

Amid growing pressures from climate change and urban development, the PRCG is committed to protecting and enhancing the Parramatta River, ensuring it remains a healthy, vibrant, and accessible waterway for both people and wildlife.

Putney Beach launch, 2025.

ourlivingriver.com.au

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