

Let's Act for the Yarra



About Environmental Justice Australia

Environmental Justice Australia is the environment's legal team. We use the law to protect our environment, and we work to change our laws to make sure they protect the right of all Australians to clean air, clean water and healthy ecosystems.



About the Yarra Riverkeeper Association

The Yarra Riverkeeper Association is the voice of the River. Over the past ten years we have established ourselves as the credible community advocate for the Yarra. We tell the river's 'story', highlighting its wonders and its challenges. We monitor its health and activities affecting it. We run educational events and river tours, and give informative presentations to schools, community groups, the authorities and businesses. We work closely with numerous government bodies and NGOs and advocate directly and through the news media for river care.



FUNDED BY:





The new Victorian Labor Government has committed to establishing a Yarra River Protection Act. Together Environmental Justice Australia and the Yarra Riverkeeper look to provide leadership in the community and NGO sectors on what that legislative framework will look like. This report is a first step in that journey, intended to inform discussions and development of ideas and frameworks for better governance of the river, with a view to improving the ecological health of the river and its value as a feature that helps Melbourne to earn its famous 'most livable city' label.

The Yarra and its catchment are human, as much as natural, places. The complex web of laws and regulations that apply to the Yarra are not working

well, and this is contributing to ecological, land-use and water quality problems. Ultimately, sorting out the regulatory problems – the 'law of the river' – will not solve every issue impacting on the Yarra. Governance and regulation do not, for instance, make up for the need to adequately fund initiatives to repair and protect the environment. But good governance is a necessary and very important step that ought to be built around an ambitious and far-sighted vision. We must ask the question: What kind of Yarra do we want? A clear Yarra? A swimmable Yarra? A haven for native species? A sanctuary from the mountains to the bay? A model of urban ecology? Good laws and clear governance arrangements can help us achieve those ambitions.

Key points

The Yarra suffers from three main problems:

- 1. Overdevelopment.** Population growth and increasing density of development along the river corridor are leading to more and more disputes about development. Inappropriate development ignores the needs of the river as a whole.
- 2. Nature under stress.** Despite recent successes with revegetation and conservation, many native fish, mammals, trees and grasses have declined since Melbourne was established, while weeds, invasive fish and animal species have increased. The ecology of the Yarra corridor is still stressed throughout much of its length, with some areas of major degradation.
- 3. Poor water quality.** Urban stormwater run-off washes litter and chemicals into the river. Heavy rain upriver results in sediment and agricultural chemicals running into the river. Litter is an increasing problem, as the barges set up to trap rubbish in the lower Yarra demonstrate.

Currently, a complex series of laws and regulations governs the Yarra. There are 11 council municipalities along the river from source to sea. Agencies such as Melbourne Water, Parks Victoria and the Environment Protection Agency oversee specific management functions, and many other government agencies also have a role in managing the river and its surrounds. The current complex bundle of laws, instruments, plans and policies fragments decision making about the river, making it harder to address the Yarra's problems.

A Yarra River Protection Act along with an independent Yarra River Protection Trust can cut through the complexity of the current regulatory situation, making it easy to ensure good decisions are made to protect the river.

History of the Yarra

In what is now the heart of Melbourne, there was once a natural crossing of the Yarra River, formed by an ancient lava flow. This basalt line, near where Princes Bridge is today, formed the barrier between fresh water flowing upstream and the seaward, estuarine river downstream. European ships docked on the seaward side and unloaded near Elizabeth Street.

Before Melbourne was built, there were wetlands all along the lower Yarra, stretching out beside mudflats toward what is now Port Melbourne and South Melbourne. The lower Yarra was a great delta, built up over thousands of years from sediments deposited from the upper catchment and the home and Country of the Wurundjeri and

Bunurong peoples for generations back to time immemorial. Once early Melbourne was built, the freshwater side provided the town with its water supply – and also functioned as a sewer.

The Yarra was interfered with more and more to meet the needs of the new city. Bridges were built and the old basalt flow across the river was blown up to make it navigable further upstream. The river was diverted by gold mining and the development of ports and docks. The catchment was cleared of its ancient eucalypt forests. The Indigenous population were killed or corralled into missions, with devastating effects on Indigenous peoples and their culture. Industries were established along the river banks and the



use of the river channel as a vast open sewer was increased. As early as 1842 a 'vile-smelling row of slaughterhouses' had sprung up along what is now the Flinders Street extension, commencing the era of industrial pollution of the river.¹ 'By the 1890s, a Scottish traveller claimed it was "the filthiest piece of water I ever had the misfortune to be afloat on".²

Regulation, public works and economic changes progressively stepped in to mitigate and respond to such problems. Sewers were laid, and some polluting industries were moved elsewhere. After popular pressure, there were further efforts to clean up the river in its lower reaches through the 1970s and 1980s. In more recent years, pressures on the river in urban Melbourne have emerged from development and building along the river corridor.

Rural activities in the middle and upper parts of the catchment still have important effects on the river, for instance from sediment run-off and land clearing. Flows down the river are significantly affected by the extensive dam construction programs of the twentieth century. The ecology of the river has changed markedly – and irreversibly – since colonisation, not only in the river itself and its adjacent wetlands but, more dramatically, in the changes to the catchment and the shift from forests and woodlands to farmland and then to concrete, asphalt and Colorbond.

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Overdevelopment

The Yarra is one of the last big open spaces available to Melburnians. Developers like to talk about the river in a passive way, citing 'views' and 'aspects', but the river should be a living space for nature and people alike. Interacting with the river comes in many forms – walking, cycling, rowing, kayaking, boating, fishing – and it should not just be seen as a static image behind glass.

Management of development along the river corridor has become more controversial as awareness of and concern with environmental impacts has grown. Factors include greater density of development in urban areas and growing population pressures in the inner suburbs of Melbourne. There are competing pressures in these areas between residential and commercial development, and the desire for open space and natural features. There are also pressures around the form development should take – such as what buildings should look like and how big they should be – and where those developments should go. Analysis of development pressures in urban areas has found 'the areas closest to the river are both those of highest value to the community (for environmental, character and recreation values), and also the areas with greatest pressure for development'.³

Many disputes over developments along the Yarra in inner suburbs of Melbourne have ended up before Victoria's planning review tribunal. In recent years, these cases have included the development of substantial multi-dwelling buildings close to the river, opposed by community groups and, in some cases, the local council, as inappropriate to the nature and character of the river corridor.⁴

Further up the river corridor from inner urban Melbourne, other controversies have emerged. Peri-urban development can sit uneasily with appropriate land uses along the river. So, for example, efforts to establish a golf course at Yering, near Lilydale,⁵ were opposed on grounds including the risk of pesticide and fertiliser run-off into the river, although it was ultimately design problems associated with building on the Yarra floodplain that halted the development.

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The Yarra is mildly stressed throughout... but with some localities and some components of the biota considerably degraded.



PHOTO: MATT CHAN

Nature under stress

If you had walked the length of the Yarra corridor 200 years ago, you would have started in tall wet forests in the upper reaches, then travelled through drier eucalypt woodlands. After several days' journey, you would have arrived at the large delta and estuary in what is now urban Melbourne, the CBD and Docklands. Wetlands and billabongs would have occurred down the whole course of the river.

If you took this same journey today, you would see that the story of the native flora and fauna of the Yarra would be one of loss, of fewer concentrations of native species of fish, mammals, trees and grasses; of more weeds, invasive fish and animal species; of more farmland and stormwater drainage; of more concrete and asphalt. Your journey would generally be one witnessing increasing stress on natural systems as you walk from the upper Yarra, with forests and high natural values, through its middle corridor of farmland and suburbanisation, through to the urban areas of the lower Yarra.⁶ The story is the same for the key tributaries of the Yarra – the Merri, Darebin and Plenty creeks.⁷ In recent decades, some of this decline in some areas has halted, or even reversed, as revegetation and conservation projects have been implemented, with habitat re-established and water quality deterioration slowed.

Open spaces, in the form of linear parklands, have been retained in the middle and upper sections of the river, as well through inner Melbourne. These are important to public enjoyment of, and access to, the river. These

areas are key to the maintenance of remnant natural values of the Yarra.

Nevertheless, human impact on the natural biodiversity of the Yarra has been profound. An overall assessment of the biodiversity of the Yarra has indicated it is 'mildly stressed throughout... but with some localities and some components of the biota considerably degraded.'⁸ Some key native species, including protected and threatened species, are still found in the Yarra River and its tributaries. Platypus can still be found in sections of the river, however numbers have declined since 1990, particularly in the lower Yarra, and their current health status is considered very low.⁹ Remaining fish species include the Macquarie perch, galaxias, southern pygmy perch and blackfish. These species continue to be threatened by human actions such as altered flows, sediment loads and poor water quality, and physical barriers to movement in the river.

Riverside vegetation, which is fundamental to the ecological health of the river, continues to be predominantly 'remnant'. Although there have been efforts to revegetate and improve vegetation quality, results are patchy and sometimes achieved on an ad hoc basis, and the health of the river itself continues to be compromised by its history of habitat loss. There are profound inter-relationships between the river's health and the surrounding ecosystems¹⁰. Without further recuperation of native vegetation, the Yarra cannot return to health.

MELBOURNE WATER

KEY FUNCTIONS: Water management, planning referrals, catchment management

KEY LEGISLATION/POLICY: Water Act, Catchment and Land Protection Act, Water Plan, Drainage Strategy, Stormwater Strategy, Healthy Waterways Strategy, Yarra River Bulk Entitlement, streamflow management plans



DEPARTMENT OF HEALTH AND HUMAN SERVICES

KEY FUNCTIONS: Water quality, environmental health

KEY LEGISLATION/POLICY: Safe Drinking Water Act, Environment Protection Act



ENVIRONMENT PROTECTION AUTHORITY

KEY FUNCTIONS: Environment protection

KEY LEGISLATION/POLICY: Environment Protection Act, Pollution of Waters by Oil and Noxious Substances Act, SEPP (Waters of Vic), Neighborhood Environment Improvement Plans



TRANSPORT SAFETY VICTORIA

KEY FUNCTIONS: transport safety including marine safety

KEY LEGISLATION/POLICY: Marine Safety Act

VICTORIAN ENVIRONMENTAL WATER HOLDER

KEY FUNCTIONS: Environmental flows management

KEY LEGISLATION/POLICY: Water Act, Seasonal Watering Plan, Yarra Environmental Entitlement



WATER CORPORATIONS

KEY FUNCTIONS: Water supply

KEY LEGISLATION/POLICY: Water Act



DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING

KEY FUNCTIONS: Planning, water, biodiversity, catchment management policy

KEY LEGISLATION/POLICY: Planning and Environment Act, Heritage Rivers Act, Flora and Fauna Guarantee Act, Conservation, Forests and Lands Act, Yarra River Action Plans



PORT PHILLIP AND WESTERNPORT CATCHMENT MANAGEMENT AUTHORITY

KEY FUNCTIONS: Catchment management

KEY LEGISLATION/POLICY: Catchment and Land Protection Act, Regional Catchment Strategy



CITY OF STONNINGTON

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Stonnington Planning Scheme



PORT OF MELBOURNE CORPORATION

KEY FUNCTIONS: Port operations, planning

KEY LEGISLATION/POLICY: Port Management Act, Port of Melbourne Planning Scheme



OFFICE OF ABORIGINAL AFFAIRS VICTORIA

Indigenous cultural heritage

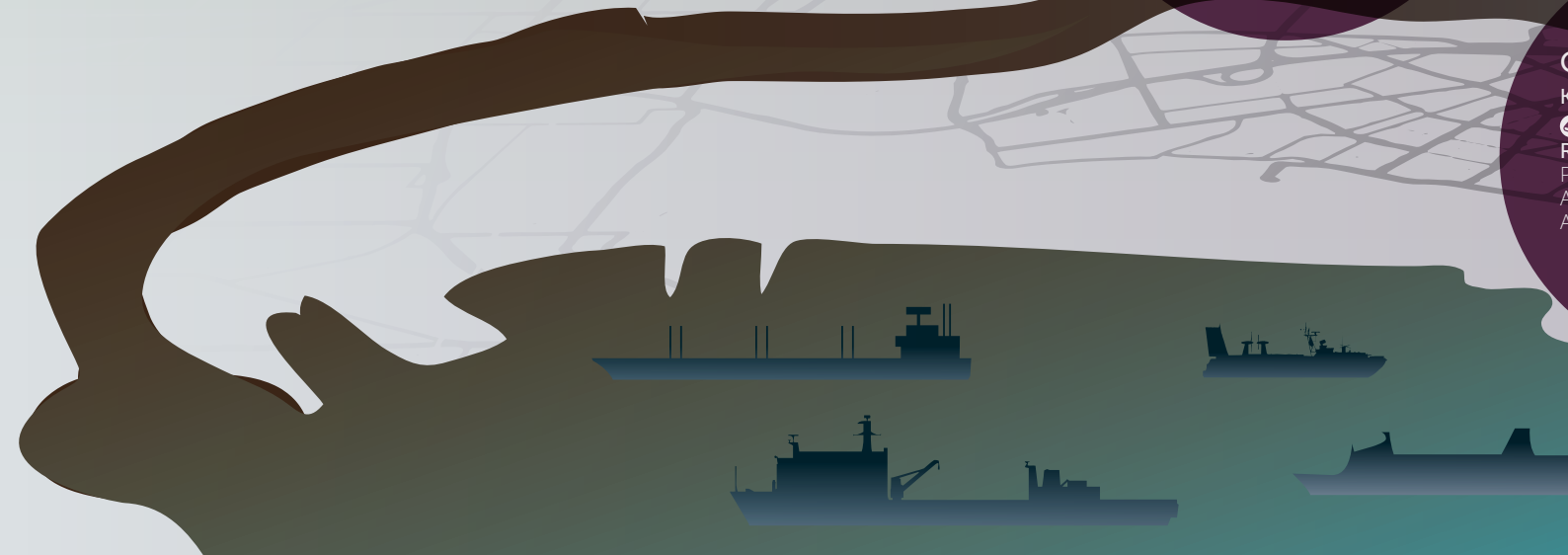
KEY LEGISLATION/POLICY: Aboriginal Heritage Act 2006



CITY OF MELBOURNE

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, City of Melbourne Act, Crown Land (Reserves) Act, Melbourne Planning Scheme



PARKS VICTORIA

KEY FUNCTIONS: Public lands management, biodiversity management

KEY LEGISLATION/POLICY: National Parks Act, Crown Land (Reserves) Act, park and reserve management plans



PLACES VICTORIA

KEY FUNCTIONS: Urban development

KEY LEGISLATION/POLICY: Docklands Act



WATER



PLANNING



BIODIVERSITY



SHIRE OF YARRA RANGES

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Yarra Ranges Planning Scheme



CITY OF BANYULE

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Banyule Planning Scheme



CITY OF BOOROONDARA

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Booroondara Planning Scheme



CITY OF MANNINGHAM

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Manningham Planning Scheme



SHIRE OF NILLUMBIK

KEY FUNCTIONS: Planning

KEY LEGISLATION/POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Nillumbik Planning Scheme



CITY OF YARRA

KEY FUNCTIONS: Planning

KEY LEGISLATION, REGULATION AND POLICY: Planning and Environment Act, Crown Land (Reserves) Act, Yarra Planning Scheme



A COMPLEX WEB OF REGULATION

The governance of the Yarra River is fragmented and lacks a coherent framework. Responsibility for the river is dispersed across state government agencies, local councils and statutory authorities. They cover a range of interests, functions and purposes such as public land and water management, land use planning, environmental protection, catchment management, marine safety, Aboriginal heritage management, and managing large-scale infrastructure. From the source of the Yarra to the sea, 11 municipalities lie along the river corridor, each with their own planning scheme, and their own focus on their part of the river. Hence, 'planning decisions made by councils tend to have a narrow focus, considering impacts only in the immediate vicinity'²⁰. The current arrangements are not optimal for the best environmental, social, economic and heritage outcomes for the Yarra as a whole. These problems have been recognised for many years by government agencies and the community, and many plans and reports have been made to try to address the problem. But no overarching and lasting solution has yet been put in place.

Poor water quality

Water quality varies across the course of the Yarra River, from very good in the upper catchment (historically protected from land clearing and pollution) to very poor in the lower part of the river. A walk along the banks of the river through the Melbourne CBD demonstrates these problems, including large amounts of sediment and rubbish caught in traps. The main focus of the Victorian Government's most recent statement and plan regarding the Yarra¹¹ is on water quality problems. Indeed, water quality in the river has been of major concern to government, regulators and the community¹² for some time.¹³

Major problems in water quality in the river and its tributaries derive from urban stormwater run-off, especially in the middle and lower parts of the river corridor and its catchment. Such run-off problems are a product of high proportions of surfaces like roads and buildings, combined with high levels of litter, chemicals, and other materials flowing into stormwater systems.¹⁴ This form of stormwater run-off is principally channelled through the constructed drainage systems, of which there are thousands of kilometres throughout urban and suburban areas of the Yarra catchment. Much of the litter and other materials that are dropped or spilled on roads and footpaths ends up in the Yarra and its tributaries. As the 2006 Yarra River Action Plan remarked: 'urban stormwater is the most significant source of pollution in the city's rivers, creeks and wetlands'.¹⁵

In addition, sewage can end up in the Yarra. Melbourne's sewage system directs sewage to treatment plants, however in very high rainfall events stormwater enters the sewage system causing it to overflow, which results in diluted raw sewage entering the Yarra at designated emergency overflow points.¹⁶

In rural parts of the Yarra, catchment water quality problems also arise from run-off flowing directly into rivers, streams and wetlands. In particular, run-off from farms, which can include chemicals and fertilisers, as well as run-off from roads, or creek and river banks cleared of vegetation, include significant sediment loads. Carried downstream,

these loads contribute to the muddied, brown colour of the river.

In all, pollution problems in the Yarra continue to occur, especially from 'diffuse' sources of run-off into the river and its tributaries, with the problems more acute during rain.¹⁷

Water quality problems need also to take account of other contributing factors. First, there is the fact that flows in the Yarra have been extensively modified by the construction of large water supply dams, by logging and fires in the upper catchment, by water extraction for agriculture, and by the straightening of some river channels.¹⁸ The regulated and restricted quantities of water flowing down the river, as well as how it flows, have significant impacts on water quality. The establishment of environmental flows ('water for the river') in the Yarra has played an important role in beginning to address the problem. But the management of flows in the Yarra will face the long-term challenges of a changing and drying climate, with decreasing natural inflows. This will also need to be factored into water management for the Yarra.

Finally, there are also legacy issues from historic concentrations of industry along the river, such as contamination with toxic chemicals.¹⁹ These sources of contamination have stabilised over recent decades as those industries have been regulated or moved.

'Urban stormwater is the most significant source of pollution in the city's rivers, creeks and wetlands.'



Where to now?

It is unlikely to be practical or desirable to bring all of the functions and powers involved in managing the Yarra under one, single regulatory framework. For instance, running the ports or marine safety or managing every function in the catchment and its myriad tributaries could not reasonably be achieved by one body.

However, land use planning, environmental management, regulation of water resources, and many aspects of catchment management can be organised better than they are currently – in a manner that recognises an integrated river system, environmentally and socially.

Grasping the opportunity for an integrated legislative framework for the Yarra, we need to clearly recognise the environmental and regulatory problems of the river and develop a new, innovative and exciting approach to managing this iconic waterway.

This brief report has laid out some of the major concerns with governance of the Yarra. Community, expert, NGO and government collaboration will be essential to a new model of governance and revitalisation of the river, building on the work of recent decades.

The incoming Victorian Government has promised to create a Yarra River Protection Act.

We believe that some of the key things the Act will need to include are:

- 1. a greater ambition for appropriate planning, river health and sympathetic catchment management;**
- 2. a coherent regulatory structure for the Yarra as a whole, from source to mouth;**
- 3. an independent agency – the Yarra River Protection Trust – to care for the Yarra and provide a focal point for improvement of the river and its surrounds;**
- 4. the right for the community to step in to have good environmental rules enforced and pathways to improved environmental outcomes considered.**

Achieving a healthy, thriving Yarra won't happen unless the community are clear and vocal about their vision for the river. Environmental Justice Australia and the Yarra Riverkeeper will be working closely with the community and government agencies to ensure the Yarra River Protection Act is developed as world class legislation to make sure the Yarra is the best river it can be.

Endnotes

- 1 J Alex Alan 'The Story of the Yarra' (1940) 18 The Victorian Historical Magazine 4 91, 99
- 2 Public Records Office Victoria, <http://prov.vic.gov.au/whats-on/exhibitions/water-stories/the-river-yarra/cleaning-up> (viewed 17 February 2015)
- 3 Planisphere Review of Policies and Controls for the Yarra River Corridor: Punt Road to Burke Road – Consultants Report (2005); see also Department of Transport, Planning and Local Infrastructure Middle Yarra River Corridor Study: Draft Recommendations Report (2014)
- 4 See for example Colquhoun & Ors v Yarra CC [2010] VCAT 1710; Prestige Homes Pty Ltd v Yarra CC [2009] VCAT 958; LeBuild (Abbotsford) Pty Ltd v Yarra CC [2010] VCAT 1240; Banyule Management Pty Ltd v Banyule CC [2013] VCAT 1652
- 5 Healesville Environment Watch Inc & Ors v Yarra Ranges SC & Ors [2010] VCAT 2047
- 6 Melbourne Water Healthy Waterways Strategy 2013/14-2017/18, 140-171
- 7 Melbourne Water Port Phillip and Westernport Regional River Health Strategy (2007), 38-56
- 8 S Brizga, I Campbell, M Peel, L David, B Finlayson Effects of Water Resource Management on the Yarra River Environment from the Upper Yarra Dam to Warrandyte: Draft Report (Centre for Environmental Applied Hydrology, University of Melbourne, 1995)
- 9 Melbourne Water Healthy Waterways Strategy 2013/14-2017/18, 166
- 10 Biaga et al Effects of Water Resource Management on the Yarra River Environment, 226-232
- 11 Victorian Government A Cleaner Yarra River and Port Phillip Bay: A Plan of Action (2012)
- 12 See Melbourne Water Port Phillip and Westernport Regional River Health Strategy (2005), 44-56; Melbourne Water Healthy Waterways Strategy 2013/14-2017/18; Melbourne Water Stormwater Strategy (2013)
- 13 See for example Annemaree Lanteri 'Student survey on problems of pollution control over the Yarra River in the City of Melbourne, 1971' (1972) 8 University of Melbourne Law Review 685
- 14 Victorian Government A Cleaner Yarra River and Port Phillip Bay: A Plan of Action (2012), 13-14
- 15 Victorian Government Yarra River Action Plan (2006), 6. The Plan continues: 'Each year, some 500 billion litres of stormwater from urban areas, containing pollutants, waste, nutrients and litter, is washed down drains into rivers, creeks and the bays when it rains.' See also Melbourne Water Stormwater Strategy (2013)
- 16 See for example - <http://www.cleaneryarrabay.vic.gov.au/issues/melbournes-sewerage-systems>
- 17 S K Das, A W M Ng and B Perrera 'Assessment of nutrient and sediment loads in the Yarra River catchment', 19th International Congress on Modelling and Simulation, Perth Australia, 12-16 December 2011
- 18 Brizga, et al Effects of Water Resource Management on the Yarra River Environment from the Upper Yarra Dam to Warrandyte
- 19 See for example Rebecca Van Gelderen and Vince Pettigrove Polychlorinated Biphenyls (PCBs) within the Yarra/Maribyrnong Rivers and Port Phillip Bay, Victoria, Australia (Centre for Aquatic Pollution Identification and Management, 2011); EPA Results for Contamination Investigations for the Yarra and Maribyrnong Estuaries (Publication 1116, 2007)
- 20 Yarra Riverkeeper, Planning to protect the Yarra River corridor: submission by the Yarra Riverkeeper Association to the Victorian Planning System Ministerial Advisory Committee (2011), 6

NUMBER CRUNCH

200 GIGALITRES – THE AMOUNT OF WATER THAT FLOWS IN THE YARRA ON A DRY YEAR

1000 GIGALITRES – THE AMOUNT OF WATER THAT FLOWS IN THE YARRA ON A WET YEAR

240km THE LENGTH OF THE YARRA

70% THE AMOUNT OF MELBOURNE'S DRINKING WATER THAT COMES FROM THE YARRA

4000km² SIZE OF THE YARRA CATCHMENT

4,000,000 THE NUMBER OF PEOPLE WHO LIVE IN THE CATCHMENT

