



What is your interest in the waterways of the west?

Community organisation

What is your vision for the Waterways of the West?

We envision waterways that are ecologically healthy, legally protected, collaboratively managed and valued from the volcanic plains to the bay coasts; considered as a holistic, connected system between built, green and blue environments; respected for their Indigenous cultural significance; and treated as a 'living and integrated natural entity.'

We commend the 'Rivers of the West' consultation undertaken by Environmental Justice Australia (EJA), Werribee Riverkeeper and Friends of Steele Creek through stakeholder workshops in 2018. In their paper *'Rivers of the West Act: Draft proposals to protect and restore Melbourne's western rivers and waterways and to defend the liveability of the West'* (June 2018) EJA articulate justice and health, two key aspects underpinning our vision for Waterways of the West: "For western Melbourne, access to and restoration of healthy ecosystems, including clean air and water, open space, interactions with nature and places to roam, and functioning biodiversity, are matters of justice as well as good practice. These conditions are deeply connected to healthy communities, effective social networks, and strengthened cultures. They are also features of our 'common wealth' that should be widely, democratically available. Access to healthy environments and places should not be a privilege of private wealth but a right of active citizenry; not only available far away, but in our urban localities and neighbourhoods."

During 2017-2018, Melbourne Water hosted well-attended 'Healthy Waterway Strategy' (HWS) co-design workshops for two western river catchments (Werribee and Maribyrnong) which served, in part, to crystallise community visions within scientific context. We note the recommendations of the Waterway Ecosystem Research Group at Melbourne University, which identify improved stormwater management, riparian vegetation and flow management as critical to achieving an ecological vision of protection, restoration and enhancement in the western waterways.

Additionally, we strongly support the performance objective identified in Melbourne Water's resulting HWS to "Provide systems to share knowledge and information between communities and stakeholders; to empower communities to participate and influence waterways management." Every group's patch is part of a bigger picture. Resourcing community groups (eg paid volunteer coordinators and grants) and collaborative gatherings will be key, to create groups and collaborations based on affinities and/or geographies; to bolster and transparently report on 'nested management' models; and to integrate the public and private management of buildings, land and waters to the benefit of the overall waterway(s) systems.

What do you value most about the Waterways of the West?

We intrinsically value the waterways and their catchments as a living entity. We recognise their values to Caring for Country, to drinking water and growing food, to human health and recreation, to climate stability, to wildlife, to industry, and as charismatic places and unique

icons of Australian place, culture and natural heritage. We value the waterways as the source of Port Phillip Bay, and its catchments as the best ways to preserve Bay health.

How do you access the Waterways of the West and its parklands?

The EcoCentre and our members access the Waterways of the West at various points and by various means such as: hiking the state forest, snorkeling the coastal marine sanctuary, walking and cycling and wildlife watching on waterside trails, kayaking Werribee Gorge, measuring point source plastic pollution at stormwater drains outside plastics manufacturers, and conducting microplastics trawls assessing the litter load on Maribyrnong surface waters.

What would you most like to see changed about the Waterways of the West?

The potential for plastic pollution to harm aquatic life (and human economies) is recognised by global researchers. Our report *'Microplastics in the Maribyrnong and Yarra Rivers, Melbourne, Australia'* (2018) identified that over 256 million pieces of litter flow from the Maribyrnong into Port Phillip Bay annually, 67% of which were microplastics (plastics 5mm or smaller). The top categories of microplastics in our samples were hard plastic fragments, polystyrene and nurdles (pre-production plastic pellets). Our range of initial recommendations include broad principles such as supporting the development of a circular economy, extended product stewardship and education programs; as well as specific interventions such as stormwater litter traps inland and implementation of best practice such as 'Operation Clean Sweep' to target zero pellet (nurdle) loss at plastics manufacturing sites.

We support the creation of a team of Indigenous Water Ranger roles, for example at Melbourne Water, who can liaise along the length of waterways with community and stakeholders, to protect water and share cultural knowledge and stories.

We call for more oversight of chemical storage and construction sites, particularly to ensure that liquid, foam and solid runoff and pollutants (from toxic paints to polystyrene beads) from such sites do not reach the waterways. It is important to review the responsibilities and accountabilities of EPA Victoria's role in potentially preventing the devastating West Footscray fire. Emergency response plans must prioritise waterways and drains/tributaries to waterways. Develop and implement practices to prevent fire retardants from reaching waterways; firefighting practices should not be detrimental to waterways, where response plans trade an acute aspect of human and ecological safety for an equally problematic but dilute impact to the fish, waters and sediments of local creeks.

In parallel to the co-design of the HWS for Werribee and Maribyrnong catchments, through their Rivers of the West workshops, EJA outlined to local stakeholders three potential visions for the region's waterways: (1) strengthening existing policy and planning tools (2) adapting the *Yarra River Protection (Wilip-gin Birrarung murron) Act 2017* or (3) a more ambitious 'green infrastructure' legislation for the West. An overwhelming majority of participants chose to support option 3 (or a variation of it). EJA has outlined key elements including

- a [Waterways] of the West Trust - an independent statutory body, to overcome 20th century management fragmentation into political geographies, functional pieces of water/land, and private/public domains
- a Green Infrastructure and Caring for Country framework and fund
- preparing 'Green Accounting' that incorporates typically externalised costs like environmental and health impacts, and considers ecological and liveability indices in future development of green/blue/built infrastructure.

Many of the recommendations emerging from EJA's 'Rivers of the West' consultations are well-aligned with the Priorities of Victoria's 'Protecting Victoria's Environment - Biodiversity 2037' Plan, such as:

- Priority 4: Increase opportunities for all Victorians to have daily connections with nature.
- Priority 6: Embed consideration of natural capital into decision making across the whole of government, and support industries to do the same.
- Priority 9: Establish sustained funding for biodiversity.

The EJA report also recommends more immediate actions including: undertaking flora, fauna and archaeological studies to map and understand the area's assets; developing a biolinks framework; implementing vital development controls and public acquisition of riparian land; the preparation of streamflow management plans; and completing a Cumulative Impact Assessment of the diversions and interception activities in the rural reaches of the catchments to understand whether and where licensed or unlicensed dams, wells or 'take under' private rights are having a significant impact on waterways.

In urban and peri-urban areas, waterway health demands an increase in permeability – including as minimum standards on greenfield developments, mandatory maximisation during infill re/development, and possibly in future through more innovative solutions such as buy-back of carparks to convert to wetlands/open space once transport modes and habits shift (eg toward share economy and self-parking/autonomous vehicles that reduce the need for the contemporary surface area allotted to parking). The increase of green infrastructure (and therefore permeability) will achieve numerous co-benefits to human health.

Rapid urban growth areas such as the western suburbs will benefit from Victoria's legislated Water Sensitive Urban Design and arguably offer opportunity for more comprehensive inclusions, such as school campus sites, that may currently fall outside the 2018 legislation but stand to contribute to healthier waterways if brought on board. We understand the use of InSite (instead of STORM or MUSIC) by local government can maximise the benefits of WSUD. The value of using InSite is that it not only addresses storm water quality, but has an inbuilt mechanism which links to Bureau of Meteorology data, which allows for the assessment to include area specific rainfall calculations including variability and therefore is a more accurate measure of site water retention. In this era of climate change impacts, WSUD and all other management strategies must use scenario planning through such modelling technologies, as well as ongoing conversations with community stakeholders and experts.

Any other comments?

The Port Phillip EcoCentre is a leading community-managed organisation with a dedicated team of scientists, educators and volunteers who design and implement innovative environmental programs. Our expertise is Port Phillip Bay health and the urban ecology of Greater Melbourne, within the traditional lands and waters of the Kulin Nation. We deliver specialist education, science-based research and community action projects with over 250 cross-sector partners. We are home of the Port Phillip Baykeeper program, an independent voice for Port Phillip Bay. The Baykeeper is part of the global Waterkeeper Alliance and we work closely with the Yarra Riverkeeper and Werribee Riverkeeper; each of us have a strong local network of waterway protectors, from expert volunteers to all scales of legislative agencies and management plan administrators.

We commend the creation of the Ministerial Advisory Committee and anticipate groundbreaking legislation for the waterways of the west. On behalf of wildlife, waterways and human wellbeing, thank you for the opportunity to contribute.

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