



Blind Creek - social infrastructure reconnects the community
Image Credit: Rory Gardiner

Fastidious Slowness: Re-naturalising Creeks and Re-integrating Ecologies

By Tom Rivard

Preface

Re-imagining your Creek is an interrelated body of work carried out by [REALMstudios](#) and collaborators across an interconnected landscape in Wurundjeri Country, in the ring suburbs of Melbourne, Australia. Working with local authority Melbourne Water, REALM investigated the potential for naturalisation of drainage channels to also deliver social, economic and environmental benefits. Arnolds Creek and Blind

Creek are now built outcomes, with Stony Creek in concept design and Moonee Ponds Creek at the masterplan stage. All four projects share the ambition to reintegrate human and natural ecologies, using water as the catalyst. The project, recently recognised with an Award of Excellence from the Australian Institute of Landscape Architects Victoria, was a collaborative endeavour between Melbourne Water, REALMstudios, Alluvium Consulting and E2DesignLab.

Conditions

For much of the world, and for most of global history, Australia was at the end of the world. Now, as an exceedingly dry continent with the majority of its contemporary population aggregated along the coasts, it is at the leading edge of climate change.

It is now also one of the world's most urbanised countries - since colonisation, its cities and towns have been sited squarely within

that territory between seemingly existential forces: economic development and environmental deterioration.

As design practitioners, it is the reconciliation of these forces, rather than the delivery of luxury goods, that we understand to be our most enduring civic legacy. Cities are the engines of climate change, as well the source of the capital, consensus and community needed to combat it. With national governments crippled by inaction, cities, through their density and diversity, remain centres of creativity and compromise, necessarily sharing resources, infrastructure, open space and culture.

As urban designers, our challenge is this: to start thinking about a city not made exclusively by human activities, nor measured only by human values. As landscape architects, we recognise a transformation in our role from designers to facilitators for broader systems, networks and ecologies

And finally, as relative newcomers to the lands of the oldest cultures on earth, we acknowledge not only the possibility, but now the absolute necessity of reintegrating human and natural systems and operations into a holistic and mutually supportive totality. In order to move forward, we need to look back.

Country

Despite colonisation, settlement, development and the seemingly

endless expansion of the suburbs of metropolitan Melbourne, it nevertheless remains an interconnected landscape.

It is still Wurundjeri Country. It has always been.

For millennia, the lands of the Birrarung (Yarra River) Valley were home to the Wurundjeri people of the Yulin Nation. Their Country extends from the bay north to the Great Dividing Range, and east and west to the Yarra and Macedon Ranges. The Birrarung Valley was traversed by many clans, benefitting from the riparian

ecosystems and surrounding woodlands, travelling throughout the valley to hunt game, fish and gather plants. Importantly, the area's protected creeks and sheltered clearings provided the spaces for shared events held by the Wurundjeri people and neighbouring clans: tribal celebrations, ritual ceremonies, family events and seasonal happenings.

While the creeks in the Valley experienced periodic flooding, they were also, during drought and climatic stress, sources of food and water – humans and animals alike would gather



Arnolds Creek - rain event during construction
Image Credit: Rory Gardiner

around clearings in the forest along creeks, where vegetation continued to flourish. The Wurundjeri have been custodians of this Country for thousands of years, managing the land and its ecosystems. Both the richness of the landscape for which they cared, and this deep knowledge, endure today.

This project is founded in recovering some of this richness, and restoring some of this knowledge, by re-evaluating our approach to water, and its “management.” Central to our approach is an appreciation of the significance of water to its surroundings - it shapes the landscape, nurtures it, and creates the framework for human interaction with the environment.

Context

The territory of Melbourne’s eastern suburbs is flat and, like much of coastal Australia, alternates between being very wet, or extremely dry. Once a complex and dynamic network of rivers, creeks and wetlands, 20th century engineering has reduced the regional catchment to a series of concrete channels and drains. Coupled with this deracination of the landscape, the surrounding communities have traditionally been deprived of much-needed open space.

The challenges were clear from the outset: regular flood events, posing significant environmental and safety risks, needed to be balanced against the ambitions of Melbourne Water to engender greater

waterway access, driven by community health and amenity. This complex set of operational parameters demanded a collaborative design-led response, one merging many disciplines: engineering, ecology, social planning and community engagement.

Considerations

The project initially demanded a cultural evolution within Melbourne Water, the agency responsible for water management across Melbourne. The agency is now reviewing how it can continue to adapt its previously sequestered infrastructure to improve environmental performance while also providing new cultural and ecological frameworks.

To satisfy these demands, instead of restoration, a process of naturalisation was applied. This is a practical methodology to reintroduce ecologies to the city, negotiating a shared territory between urban structures and natural systems. The approach required concessions to engineering efficiencies; instead of moving water as fast as possible to the bay, its movement is slowed down with natural meanders and riffles, resulting in gentler flows, holding water in the landscape.

This slowing down of water begins to recover natural processes by allowing the introduction of a range of secondary habitats and ecologies - within the complex systems that collect, store and reuse water in the landscape. The resulting permeable framework also creates spaces for absent species to be re-established within the landscape, contributing to its ongoing operations and ecologies - this is especially true of human ecologies.

Community

Community engagement was at the heart of the projects, with individuals, groups, institutions and organisations fully invested in the process, and the outcomes. Community input identified opportunities for education, recreation and communality - importantly, these aims were associated with improved water performance within the recovered parklands. The community wanted to experience water, in all its manifestations, as part of nature returned to the



Blind Creek - Elevated and cantilevering platforms
Image Credit: Rory Gardiner

city.

As the water slowed down, so could people - the renewed creeklands offered the opportunity to pause, to reflect and to reconnect with nature. The designs established flood-proof elements allowing the community to connect with water and with each other: benches, tables, bridges, platforms, lookouts, stepping stones. These elements lead people into the parks and down into the creek beds, across it and along it, where the movement of water creates an audible, visual and tactile experience.

The Australian idea of the “park”, a distinctive phenomenon as it has developed over decades, conflates many disparate things: the local community, their strong attachment to landscape, social and recreational activities, food and drink, and shared civic rituals of performances, celebrations and events. Within communities, these environmental places become

critical civic assets, dense and multi-faceted operational landscapes, capable of containing disparate multitudes of events and activities and entertaining and accommodating countless thousands. The key community challenge with the creeks was to retain the hydrological function of the creeklands, while expanding, enhancing and adapting their ecological, social and cultural performance for an increasingly diverse 21st century community, in a rapidly changing world.

Continuation

Life and activity of many types have returned to the waterways, with humans and non-humans alike finding their place in the transformed landscape. From a silent landscape devoid even of birdsong, the parks now buzz with activity and its resonance: frog croaks, insect buzzing, the rhythmic pattern of joggers and the irregular tones of deep conversations.



Arnolds Creek - Connective threads link social, terrestrial and aquatic ecologies
Image Credit: Rory Gardiner

The persistence of seemingly long-absent ecologies was a continued surprise: cessation of routine close-cut mowing saw native grass species return in abundance. The underlying ecological structures were released by this work. Project director and REALMstudios founder Jon Shinkfield offers “there are deep lines of ecology that reside around waterways, under the surface of the built landscape, that keep wanting to come to the surface.”

One of the more rewarding

aspects of these projects is their ongoing dynamism once water is released from its completely managed state. Although the framework is fixed by engineering, the design approach recognises the movement of water and the attendant change it will bring over time, particularly with engagement within the landscape from new constituents, both human and natural.

Congruencies

These new parklands have

become community collectors and connectors, encouraging activity and occupation through their extensive social infrastructure, but also through the continuously evolving habitats and ecologies that are growing throughout the transformed landscapes. Plantings are intentionally complex mosaics, with arrangements intended to continue evolving over the coming years, without the need for external intervention. Species and populations will shift annually and seasonally,

responding to broader climate, weather and water patterns - short-term and local events will connect places to larger ecosystems. The connectivity in these creeks is as much about time and space as it is about water.

Through deep knowledge of landscape and the logic of ecosystems, these creek corridors were transformed to become responsive environments within traditionally static urban areas. In these fluidic and permeable landscapes, surfaces, spaces and

activity all contribute to the management of movement, and the re-introduction of time: water slows down, plants, animals and people congregate, linger and participate in the continued evolution of the land.

These transformed creeks accommodate emerging and revitalised operations and ecologies – importantly, they allow the re-integration of human and natural constituents and activities to realign within a natural landscape. As Shinkfield says, “There is

latent power and possibility within the Australian landscape; we just need to rediscover and release it.”

Tom Rivard is an urbanist, artist and educator, engaged in speculative city making, re-imagining the productive relationships between cultural acts and the environments in which they thrive. He is a Practice Principal with REALMstudios (realmstudios.com).

