

Victoria Park Lake Shepparton



Urban Initiatives worked in partnership with GHD Shepparton and Aquatic Systems Management to prepare a master plan for the lake site, which included a comprehensive and sustainable proposal for the lake itself. This solution proposed harvesting and treating the surrounding stormwater prior to its release into the main body of the lake. The scheme provided a new, clean water source for the depleted lake and introduced marginal vegetation to large sections of the lake to reduce evaporative water loss.



Victoria Park Lake redevelopment, Shepparton

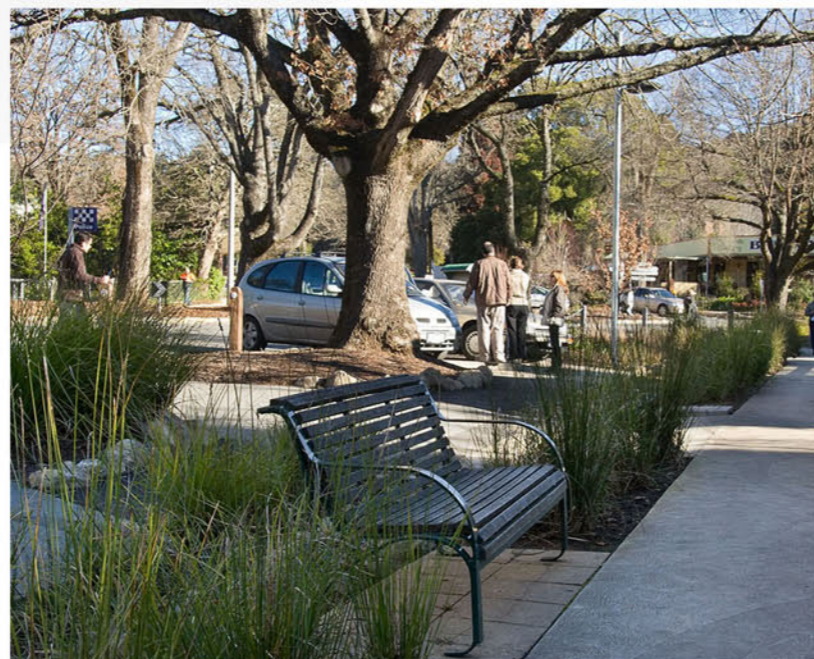


Grassed mound at Victoria Park Lake

Marysville Streetscape



Urban Initiatives designed a systematic range of streetscape improvements in the Marysville Town Centre that were a reflection of the town's history and culture, its landscape character and natural systems. Water Sensitive Urban Design was central to the renewed streetscape.



Biofiltration swale streetscape feature



Urban Initiatives Pty. Ltd. is one of Victoria's most established and respected specialist landscape architecture and urban design practices. We are based in central Melbourne and service clients throughout Victoria and Tasmania. We work for a wide range of private and government clients on a mix of built projects and policy and planning studies.

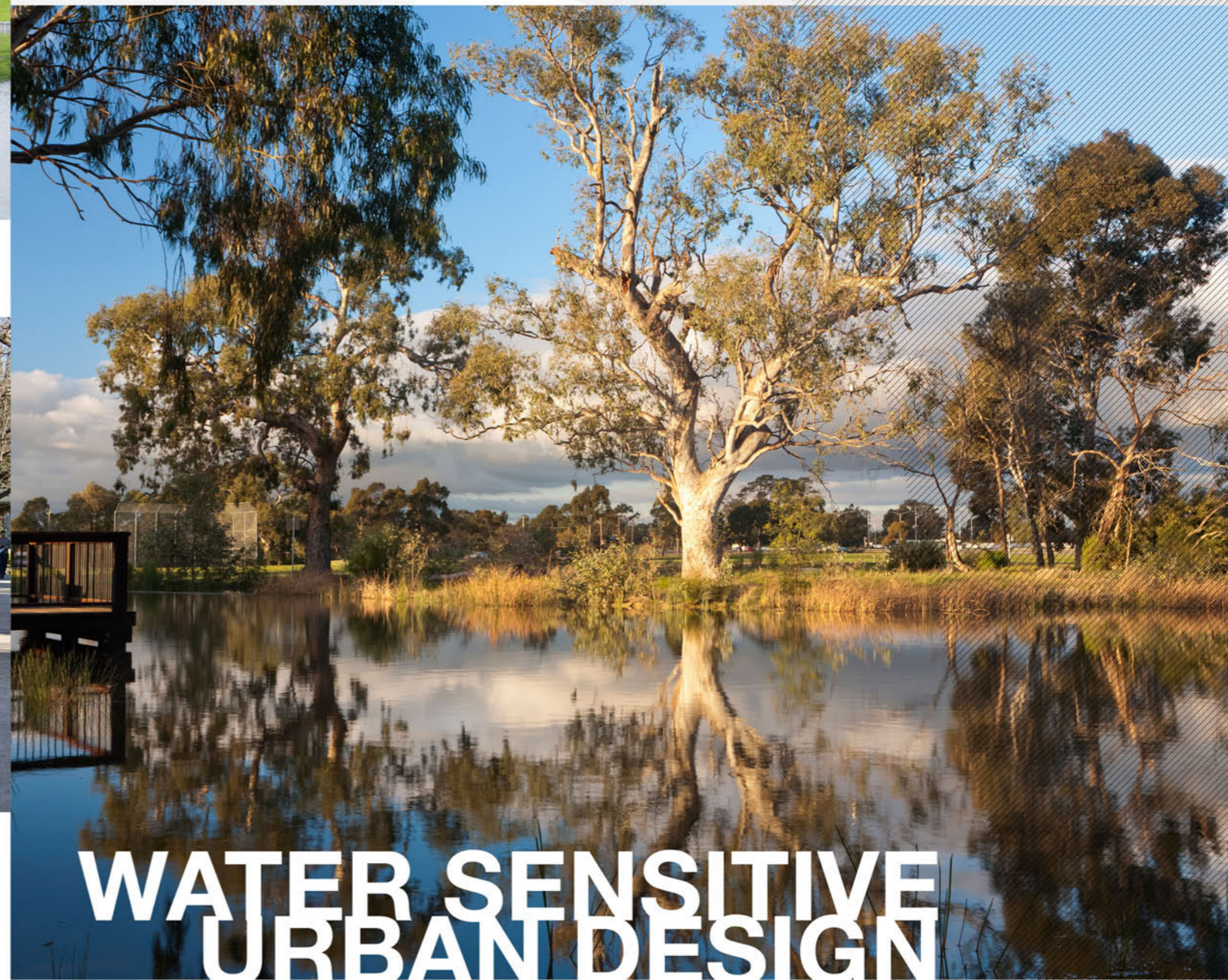
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THE WSUD AND WETLAND ECOLOGY
WORKS OF URBAN INITIATIVES



WATER SENSITIVE
URBAN DESIGN



Kubu River Hippo Exhibit Werribee Zoo

WERRIBEE OPEN RANGE ZOO

2008 AILA NATIONAL AWARD
for Excellence in Land Management

2008 ARAZPA AWARD
for Excellence

In 2004 Zoos Victoria and Werribee Open Range Zoo embarked on an innovative scheme for the \$6.4 million Hippo Marsh Exhibit. The project delivers a unique experience of Hippos in a landscape that thematically represents the Okavango Delta of Botswana.

Urban Initiatives' role in the project was to translate a biological model for the filtration system into a landscape design that would work on the Werribee site and to tie this into the existing site hydrology.

The project reflects a new approach in the world of zoological design, in that it demonstrates a unique merging of constructed ecology, engineering and landscape design. The project's pools, filtration wetlands, hydraulic and treatment systems are all integrated into the Kubu River Exhibit in a way that engages the visitor and promotes an ecological understanding of Hippo habitat. The exhibit is at once tailored to the animals' needs and environmentally sustainable.



Water Sensitive Urban Design Approach

Urban Initiatives has incorporated wetland and water sensitive urban design principles in our design projects for over twenty years – this remains a constantly evolving area of our practice. We frequently collaborate with specialists when working on projects of this type so that we can draw on the best, related expertise in engineering, freshwater ecology and the use of aquatic plants. Projects are usually designed to reduce stormwater runoff through bio-retention areas and to treat stormwater in wetlands, raingardens or through other filtration mechanisms. Increasingly projects not only seek to address both detention and treatment imperatives but are also seen as water harvesting opportunities, where water collected is reused in landscape irrigation.

Landscape architects are well placed to consider these technologies in a manner that best integrates the WSUD mechanism into the urban, parkland or institutional setting where the water is to be collected and treated. Capturing, treating and reuse of stormwater on site can add to the ecological richness of a place while also reducing capital expenditure on downstream heavy engineering solutions and conventional methods of irrigation. These water treatment systems must, however, be well resolved in terms of their appearance, functionality and safety, especially when retrofitted into existing sites.

We have developed clear ways to communicate ideas, strategies and appropriate WSUD precedents to clients and the community. The office is experienced in the design and documentation of earthworks, edge and surface treatments and the scheduling and specification of wetland planting and establishment. Urban Initiatives has completed projects which included both purpose built and off the shelf bridge and boardwalk systems in river corridors, lake and wetland systems.

Services we can provide include:

- Master planning of open space systems along river, creek and drainage lines exploring opportunities to retard or otherwise treat water to enhance its ecological and amenity value. These plans usually also look at path systems, vegetation management and provision of a wide range of active and passive recreation facilities.
- Plans for enhancement of water quality in existing lakes and water bodies. This may involve consideration of management of the water quality of catchments and special design of water treatment wetlands that restore ecological health and discourage damaging blue green algal events. Often these projects require design of the setting to maximise people's enjoyment and safe use of the area.
- Design of gardens and rooftops to capture, store and reuse water on site.
- Development of new purpose specific wetlands that are designed to enhance water quality, such as the wetland at Werribee Zoo designed to treat water within the Hippo exhibit. This will lead to long-term benefit through minimising the need to draw water from the Werribee River.



Car park bio filtration system



Bio Filtration median strip



Storm water catchment and filtration swale



Administration Office Landscape courtyard

University of Tasmania Sandy Bay

UNIVERSITY OF TASMANIA

The new Upper Campus, Churchill Avenue Entry, formerly dominated by cars and car parking, now features pedestrian priority and on site treatment of pavement-borne environmental pollutants. Aligned to new public transport nodes on Churchill Avenue, a barrier free link and iconic signage helps promote seamless movement of pedestrians and car park users to the academic and administrative core of the campus.

Each section of the car park is designed as a 'catchment' drained to island filtration cells. Geo-technical testing of filtration substrates ensured the design optimised filtration rates and the uptake of stormwater pollutants. Filtration rates of 200-500mm/hour have been achieved in the filtration cells, an absorption rate consistent with the design criteria and Southern Tasmanian and Victorian WSUD standards.

Skretting Administration Office, Cambridge

ARCHITECTS DESIGNHAUS

2009 AILA TASMANIA AWARD
for Land Management

The intent of the Skretting Administrative Headquarters project is to establish a 'whole site environment' that is both ecologically responsive and a pleasant environment for staff and visitors. The Company wished to enhance its environmental management credentials and sought a clear expression of their sustainability objectives in a site-specific design response.

The new facilities are placed at a discrete distance from the main plant area but close enough for staff to move easily between the manufacturing plant, the workshops and the administration wing. The project aimed to create seamless access for anyone with a disability and to ensure that the discrete work areas are clearly linked and function efficiently. All surface and carpark runoff is to be filtered on site while roof stormwater is to be harvested and stored in 20,000 litre tanks.