

Ecoscope environmental personnel have been working in wetland management and planning since 1987. Our personnel have witnessed the evolution of wetland protection legislation and guidance that has been implemented by the regulatory agencies over the last 10 years, and are familiar with recent rehabilitation methods, wetland value assessments, mapping wetland boundaries, buffer zone determinations and management techniques.

Ecoscope is aware of the need for multi-use buffer zones around wetlands in order to maintain protection of the environmental values in conjunction with addressing public amenity and bushfire protection. A demonstrated example of this is the Lakeside development in Hammond Road, Success which commenced in 2010 and was completed in 2014. This project was supported by the City of Cockburn, managed by Ecoscope and endorsed by the Department of Parks and Wildlife, to achieve restoration of conservation category wetland vegetation through physical removal of problem Sydney Wattle infestations. The resulting wetland buffer now provides a bushfire protection zone and passive recreation amenity with the addition of a permeable walk trail around the wetland.

An additional example of our skills and experience with wetland restoration and conservation management can be found at Tomato Lake in the eastern suburb of Kewdale. The City of Belmont initiated a preliminary planning project

to review and evaluate Tomato Lake Park, Kewdale, with a view to introducing staged improvements to enhance the existing quality of recreational facilities and ensure a high level of environmental conservation over the next 10 to 30 years. Ecoscope undertook research and review of previous plans and reports, a thorough site analysis and identified opportunities and constraints. Ecoscope's vision was to create a unique parkland character providing site responsive public activities and facilities to support the sensory development of children and the emotional and physical well-being of the community while maintaining the key ecological values of the site.

Ecoscope's Spatial Planning GIS team are skilled in the representation of wetland values through high quality maps. All of the listed projects have maps displaying wetland vegetation communities, bushland condition, management planning zones and fauna habitats.

ECOSCAPE'S SERVICES IN RELATION TO THE SCOPE

- » wetland management plans
- » wetland buffer and classification determination assessments and applications for modification
- » wetland restoration plans
- » Master Plans for wetland environs
- » wetland monitoring
- » rehabilitation, restoration and revegetation plans
- » weed management plans, surveys and monitoring
- » mosquito and midge monitoring and management plans
- » terrestrial fauna surveys; including conservation significant fauna species
- » natural area assessments using the Natural Area Initial Field Assessment template
- » vegetation protection and management plans
- » bushfire management planning in wetlands
- » fauna relocations
- » fauna protection and management plans

COMPETENCIES

Ecoscope has dealt with a wide range of wetland management issues through engagement by Local Governments on the 37 wetland projects listed below between 2006 and 2015. These projects demonstrate our knowledge and experience in wetland environmental planning and management that has assisted Local Government to resolve its environmental compliance and sustainability. Ecoscope Management Plans and Strategies are prepared to Local Government Biodiversity guidelines and EPA standards.

2015	Whiteman Park CEMP	2013	Kwinana Freeway Foreshore MP
2015	Cockburn Central Wetland MP	2013	Lake Gwelup Management Plan
2014	Lakeside Success Wetland Restoration and MP	2011	Tomato Lake MP
2014	East Fremantle Foreshore MP	2011	Bibra Lake Bird Hide
2014	Kiara Farm School Environmental Study	2010	Carine Open Space Environmental MP
2014	Lot 55 Wetland Management Plan	2010	Bibra Lake Bird Walk
2013	Ascot Wetland Modification	2010	Lake Richmond Water quality Study

2009	Mabel Talbot Reserve	2007	Lake Claremont Management Plan
2009	Big Swamp, Bunbury - Weed Mapping	2007	Lake Monger Reserve MP
2009	Urban Wetlands Monitoring Program	2007	Wetland Assessment Royal Street, Kenwick
2008	Vegetation Monitoring of Lake Toolibin	2007	Big Swamp Weed Management Plan
2008	Review of Wetlands of the Southern Suburbs	2007	Shreeve Rd Red Wetland MP
2008	Kenwick Wetland Re-classification	2006	Geogrup - Black Lakes Action Plan
2008	Waterway Assessments of Reaches of the Lockhart & Camm Rivers	2006	Ecological Water Requirements of Wetlands in the Peel Catchment
2008	Lake Ballard Management Plan	2006	Lake Claremont Rehabilitation
2008	Lake Richmond Management Plan	2006	Restoration Plan for the Busselton Wetlands
2007	Waterway Assessment - Lockhart and Yilgarn Rivers	2006	Wetland Buffer Assessment, Busselton
2007	Baigup Reserve EMP	2006	Lake Jualbup Feasibility Study
		2006	Vegetation Monitoring - Toolibin Lake

QUALIFICATIONS

All sixteen members of the Ecoscape environment team have BSc. Degree level qualifications or higher, with four members having achieved PhD level doctorates.

CERTIFICATIONS

Ecoscape is ISO 9001:2008 Quality Management System certified. Certificate No: QEC23973.

PROFESSIONAL RECOGNITION AND MEMBERSHIP

Ecoscape Managing Director David Kaesehagen founded the Western Australian arm of the Australian Association of Bush Regenerators (WA) – (AABR).

Ecoscape Associate Director Bruce Turner is a member of the Environment Institute of Australia and New Zealand (EIANZ) and is also a member of the Environmental Consultants Association (WA) Inc. (ECA). Bruce is currently in the process of applying for CEnvP status for environmental impact assessment and ecology. Bruce was a member of the Golden Banksia Award winning team in 2001.

Director Marc Wohling and Associate Environmental Scientist Lyn Atkins are members of the Ecological Society of Australia (ESA), with Marc and Lyn joining in 2006. Marc is also a member of the Australian Anthropological Society, also since 2006.

Ecoscape Associate Environmental Scientist Dr Markus

Mikli is currently the Chairperson for the Revegetation Industry Association of Western Australia (RIAWA) and has been an active member of RIAWA since 2008.

Principal Environmental Scientist Kellie Bauer-Simpson has been a Member of the ECA since 2008. Senior Environmental Scientist Dr John Scanlon has been a member of the Society of Vertebrate Paleontology (SVP) since 2006.

Ecoscape is also affiliated with the following organisations:

- » The Australian Institute of Landscape Architects (AILA)
- » Urban Development Institute of Australia (UDIA)
- » International Association of Landscape Ecologists (Australasian chapter)
- » Mapping Science Institute Australia (MSIA)
- » Society for Ecological Restoration International (SERI)
- » Australian Society of Limnology (ASL).

RELEVANT LEGISLATION

Ecoscape is aware of and understands all State and Commonwealth environmental legislation and where it pertains to issues raised in Local Government projects. Ecoscape personnel are all familiar with both the State and Commonwealth assessment processes through submission of projects for both formal and informal assessments by the regulators.