

Workbook for **Managing Urban Wetlands in Australia**

Edited by S. Paul



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Foreword

It is more than 10 years since the Sydney Olympic Park Authority started a Wetland Education and Training (WET) Program. The education and management courses have been run for wetland practitioners and many others who are interested in wetlands. I am immensely proud of the education programs at Sydney Olympic Park, which leverage on the Park for learning.

The Park's wetlands provide a true microcosm of wetland management and conservation issues in Australia. These wetlands are a precious resource in this heart of highly urban Sydney.

The management of wetlands in the Park is a challenging and complex task. To meet this task the Authority staff, advisers, contractors and volunteers have a long history of dedication and commitment to looking after these remnant and constructed wetlands. The publication of this eBook shares this extraordinary wealth of knowledge, expertise and wisdom.

This *Workbook for managing urban wetlands in Australia* is a distillation and distribution of the contents, partnership, collaboration and research, which have made up the WET program over the past decade.

I particularly want to acknowledge the dedication of members of the WET Technical Advisory Panel, who have been the driving force for the WET Program and have overseen the production of this eBook.

I congratulate the Authority's Education team for the production of a practical field manual, which I am confident, will help enhance the cause of wetland management and conservation in Australia.

Michael Knight AO
Chair
Sydney Olympic Park Authority
28 November 2013

Preface

The largest area of Australian wetlands lies in non-urban parts of Australia. However, the greatest loss of wetlands has occurred in urban Australia where 89% of Australians live. Many of the wetlands that were once an integral part of these urban landscapes have been heavily altered and some are almost totally lost. Land owners' attempts to ease this alteration and reclaim some of these lost wetlands have provided the platform for devising tools and techniques for wetland rehabilitation. The increasing demands for constructed wetlands for stormwater retention and treatment, as well as aesthetic considerations, have compounded this need. The vast majority of wetland construction, rehabilitation, restoration and maintenance activities are concentrated in urban Australia. Access to information that captures the above elements and encompasses management solutions should be of great interest to people involved in the health of wetlands in urban Australia.

Over the last ten years, the Sydney Olympic Park Authority's Wetland Education and Training (WET) Program has provided information and practical training through WET workshops at Sydney Olympic Park. This *Workbook for managing urban wetlands in Australia* is both a culmination and celebration of the WET Program. It contains useful hands-on information about managing both freshwater and estuarine wetlands in Australia.

The WET Advisory Panel, consisting of recognised wetland scientists, practising ecologists and wetland managers, guides the WET Program in formulating the structure and content of the workshops. This panel supported the production of this eBook.

It is pleasing that the Sydney Olympic Park Authority is happy to encourage accessing share this eBook at no cost and encourages the community to access the immense knowledge and experience made available by an amazing group of wetlands professionals.

Considerable emphasis was paid to on-the-ground applicability of the contents in the eBook. Where suitable, as many practical examples and case study citations are incorporated into the eBook to make it a truly practical field guide. These are placed in distinct boxes so that they are readily identifiable. Contents are carefully tailored to suit those who directly manage wetlands on a daily basis as well as those who need to look for technical and scientific bases for making management decisions. It should also come in very useful for students and beginners in wetlands management. I am confident that this eBook has struck this balance very well.

The eBook has a total of five sections and 28 chapters. It is the outcome of a team effort. I thank the WET Technical Advisory Panel not only for the guidance but also for the collegiate nature of their engagement. These two have been the key forces in the success of the WET Program over the past decade.

Preface

I feel privileged to be the editor of this eBook. All the authors have made wonderful contributions and I sincerely believe my appreciation will be further confirmed by those who read and make use of the contents.

Other key people who remained very supportive and deserve special mention are Mr Mike Bartlett, Manager Education and Ms Kerry Darcovich, Senior Manager Environment and Ecology at the Authority as well as Ms Susan Skuodas, Executive Manager of the Authority's Marketing & Corporate Communications & Community Engagement Communications branch. Two technical people who have made my task much easier are Ms Lisa Emmanuel, a probationary Graphic Designer from University of Western Sydney and Ms Virginia Mapagu, the Authority's graphic design team leader. Thanks to Mr Whaijing Jong for the web support.

Finally, I should like to mention the inspiration that this team has received from the support by the Chief Executive Officer of the Authority Mr Alan Marsh and the Authority's Chairman Mr Michael Knight AO. Through their leadership and guidance the parklands and wetlands in the Park are protected and conserved in an exemplary manner.

To keep this relevant with the changing time and technology it is intended that newer editions should be published with additional contents.

Enjoy using this eBook now and in the future!

Dr Swapan Paul
Wetlands Manager
Sydney Olympic Park Authority
28 November 2013