

## Development of a Nursery for a Wetland Project in Oman

David Hancock

Natural Area Environment Consulting Services  
233c Drumpellier Drive, Whiteman Western Australia, Australia 6068

[david@naturalarea.com.au](mailto:david@naturalarea.com.au)

*Keywords:* Middle East, water purity, ecology

### INTRODUCTION

The oilfields of Oman, along with others in the Middle East and elsewhere in the world, produce large amounts of ground water as a by-product of the oil extraction process. This oil contaminated water is often dealt with by return to the deep oil field aquifers. Petroleum Development Oman has established the largest constructed wetland in the world by engaging a German environmental consultant to design and construct a vegetated wetland to purify the oil-laden water to avoid the use of fossil fuel power sources to pump the contaminated water deep underground. The volumes of water are enormous, and the success of the project is demonstrated not only by the water purity of the wetland outfall but also by the wetland supporting extensive wildlife that otherwise would not be present and to offset habitat loss in other migratory zones.

This presentation will demonstrate the science and engineering brought together by specialists from around the world to develop an environmentally responsible solution and provide an example of the power of constructed natural processes to address water pollution challenges. The presentation will include the latest staged addition to the wetland, involving the propagation of wetland species endemic to Oman in a collaboration between international wetland scientists and plant propagation specialists.