

WETLAND CONSERVATION

by Adrian Pinder

WA's unique and diverse wetlands are rich in ecological and cultural values and form an integral part of the natural environment of the State. The department carries out monitoring and research of wetlands at the Pilbara's Fortescue Valley and in the Wheatbelt, South West and Warren regions. The data collected will indicate changes over time and investigate responses of wetland animals and plants to threatening processes.

One such research project aims to understand the hydrogeological processes sustaining the Walyarta organic mound springs in the Great Sandy Desert and Eighty Mile Beach Ramsar wetland. Knowledge from this project will result in an improved ability to model the potential impacts of groundwater resource development in the West Canning Basin on the Walyarta and similar springs. Investigations have shown the important connection between groundwater and the surface springs with groundwater from depths up to 200 metres below ground level supporting the springs. DBCA scientists have hydrochemically fingerprinted the aquifers in order to assess and model the discharge rate of the springs.

Large scale hydrological investigations such as this rely on collaborations with research partners such as CSIRO and the Australian Nuclear Science and Technology Organisation, and requires engagement of industry and government as end-users of the research.