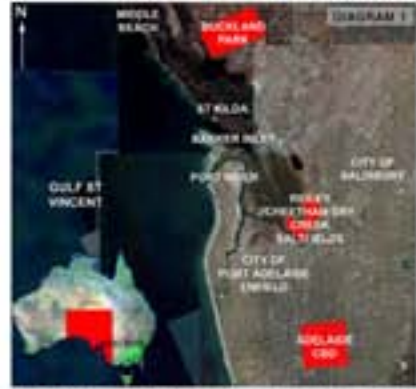


AN IONIC LANDSCAPE

"The first step toward building a sustainable world ... is to open up our landscapes to view, such that we may learn from them where we are, how we are doing, and what we need to do to make the world better." Robert Thayer, "Grey World, Green Heart", (1994)

The Ridley Cheetham Dry Creek Saltfields harvest salt (sodium chloride - NaCl) through the largest solar evaporation process in the southern hemisphere. The common salt that characterizes this landscape consists of microscopic cubes that are held together through ionic bonding, hence the title, "An Ionic Landscape".



The Ridley Cheetham Dry Creek Salt Fields are currently under threat from the state government's proposed "Northern Connector Expressway", which will likely divide the site and force the salt production to another location.



Reverse Osmosis Desalination is a process that separates salt and mineral particles from seawater by forcing the water through a membrane under pressure. The recovery rate of potable water is approximately 43-45%, which implies that twice the volume of seawater needs to be extracted from the ocean than the amount of potable water produced.



Through the utilization of the Buckland Park Desalination Plant, the state government's "Northern Connector Expressway" can be realized; Ridley Cheetham can retain their salt production, and continue to contribute to the state's economic wealth, and 300 hectares of an intertidal environment can be restored to its pre-European condition.

- 01 Greenfields Wetlands Stage 2
- 02 Greenfields Wetlands Stage 3
- 03 Barker Wetlands
- 04 Existing Levee Embankment
- 05 Dry Creek Drain
- 06 Navy Northern Connector Expressway
- 07 New Levee Embankment
- 08 The Ecological Centre
- 09 The Ecological Trails
- 10 The Kayaking Water Activities Centre
- 11 The Dry Creek Wetlands
- 12 The Magazine Wetland
- 13 Pedestrian Bridges
- 14 Light Industrial
- 15 Residential

- Trails Within 1km of Eco Centre
- Trails Within 2km of Eco Centre
- Trails Within 3km of Eco Centre

- Birdshades
- Primary Seating/ Interpretative Area
- Secondary Seating/ Interpretative Area
- ASTR Injectors/ Extraction Pumps

- Vehicular Access to Park
- Toilet Facilities
- Created Access
- Kiosk
- Information
- Lookout
- No Pets

- Avicennia marina - Mangrove Woodland
- Sarcocornia quinqueflora - Submerged or low marsh
- Marsilea oppositifolia - Emergent or mid-high marsh
- Atriplex Paludosa - Emergent or mid-high marsh
- Leguminosae, Chenopodiaceae, Cyperaceae and Frankeniaceae species
- Melaleuca halimifolium



The Dry Creek Ecological Park, formerly the Ridley Cheetham Dry Creek Saltfields, is not only an attempt at restoring the intertidal environment that previously existed; it is the case study in building a sustainable world. This will become a reality through the collaboration of various professions, the local council, and most importantly the local community. Their involvement will encourage an appreciation of the landscape, ultimately securing the park's future existence.

The Dry Creek Ecological Park will become a reality through the relocation of the proposed Pt Stanvac Desalination Plant to Buckland Park, 43 kilometres north of Adelaide (See Diagram 1). The Buckland Park Reverse Osmosis Desalination Plant will be the epitome of sustainable desalination practices. The resultant brine will be directed into the adjacent solar evaporation salt pans that extend along the northern end of the Gulf St Vincent. As this brine will be twice the concentration that is already pumped into the salt pans, the desired NaCl concentrations will be reached quicker, and hence only half of the pans will be required (See Diagram 2). As the last phase of the solar evaporation process, the Ridley Cheetham Saltfields will no longer be needed and the site can ultimately be reclaimed (See Diagram 3 and Landscape Plan).

This rehabilitated landscape will provide a habitat for a range of terrestrial, avian and marine species while also offering the spectacular beauty of a pristine landscape. Accompanied by innovative design installations that not only direct and inform the visitor, the Dry Creek Ecological Park will have local, national and international significance.

The Dry Creek Ecological Park



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An Ionic Landscape – The Dry Creek Ecological Park

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