

Ecological Character Description knowledge gaps

The development of Ecological Character Descriptions (ECD) for the five Ramsar sites in Queensland identified gaps in the knowledge of critical components, processes and key threats. The gaps were prioritised taking account of past and current research and monitoring. Three sites were selected for further investigation: Great Sandy Strait, Bowling Green Bay and Currawinya Lakes.



Bowling Green Bay near Townsville. Photo: DERM

Background

Queensland has five Ramsar sites: Moreton Bay, Great Sandy Strait, Shoalwater and Corio Bays, Bowling Green Bay and Currawinya Lakes. Ecological Character Descriptions (ECDs) have been prepared using the National Framework guidance document for describing the ecological character of Australian Ramsar wetlands. Each ECD includes, among other things, knowledge gaps and monitoring requirements.

The Australian Government is required to notify the Ramsar Convention if a site's ecological character changes.

To ensure this obligation can be met, the Australian Government is piloting a process of systematic review of Ramsar sites in Australia. The process aims to alert the Queensland and Australian governments of any change in a site's character. A monitoring framework to support the process will be developed and will be based on the ECDs and the outcomes of this Queensland Wetlands Program project.

The ECDs identified knowledge gaps for each site. In some instances, these gaps are common across more than one site, e.g. water mouse nesting areas. In

others, the gap is particular to one site, e.g. the extent of patterned fens in the Great Sandy Strait site.

Method

The following activities will be undertaken to address the key knowledge gaps:

- a study of acid frogs, the water mouse and endangered freshwater fish, and the mapping of pattern fens within the Great Sandy Strait
- a survey of water birds native to the Currawinya Lakes site
- surveys of water birds and shorebirds in the Bowling Green Bay site
- research to determine the source and pattern of sediment levels in the Currawinya Lakes and how it might influence the site. The outcomes will identify the effect sediment levels could have on the local bird life and establish methods of conservation to reduce the impacts.



Great Sandy Strait patterned fens near Maryborough.
Photo: Derm

	Great Sandy Strait	Bowling Green Bay	Currawinya Lakes
Acid frogs	✓		
Birds		✓	✓
Water mouse	✓	✓	
Patterned fens	✓		
Fish	✓		
Sedimentation			✓

Areas of prioritised knowledge gaps identified by Ecological Character Descriptions

Products and tools

The results from this project will lead to a greater knowledge of the three Ramsar sites. The products and tools will include:

- a conceptual model map and report of patterned fens in the Great Sandy Strait
- improved knowledge of the status of vulnerable and endangered species particularly acid frogs, the water mouse and freshwater acid fish
- up-to-date data on the use of Currawinya Lakes by waterbirds
- information on the extent, rate and implications of sedimentation in Lake Wyara in Currawinya
- the current status and natural variability of the waterbirds and shorebirds in Bowling Green Bay
- advice on management actions that will maintain ecological character
- information to help inform the proposed monitoring framework for Ramsar sites in Queensland.



Wetland in the Great Sandy Strait. Photo: DERM

The Queensland Wetlands Program supports projects and activities that result in long-term benefits to the sustainable management, wise use and protection of wetlands in Queensland. The tools developed by the Program help wetlands land holders, managers, and decision makers in government and industry.

The Program is a joint initiative of the Australian and Queensland governments.

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