

Protection and management of coastal saltmarsh

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Introduction

As awareness of the plight of saltmarsh habitats in Australia increases, so does the imperative to protect and manage these areas effectively. This includes the restoration of degraded habitat, creation of new saltmarsh where possible and ensuring saltmarsh remnants are protected through statutory mechanisms from further loss and degradation. For these activities to occur, it is essential to understand the general ecology of the habitat and the ecological functions of the ecosystem under non-disturbed conditions. Previous chapters of this book provide the first synthesis of this knowledge for Australian saltmarshes.

The purpose of this chapter is to discuss management issues and responses for Australian coastal saltmarshes. Management includes protection under planning frameworks as well as on-ground works to improve or maintain saltmarsh. Activities can include 'do nothing' scenarios where a saltmarsh is in good condition and requires low-key management measures such as formal identification and isolation from disturbance. Active management activities can be as simple as weed removal, or as complex as restorative efforts depending on resources and need.

Issues demanding protection and management of existing saltmarsh

A crucial part of management, and formulation of appropriate management options is recognition of activities that cause disturbance (Laegdsgaard 2001). The history of the site, the cause of problems within a marsh area and the level of perturbation can be the key to effective decision-making regarding the management of a particular area.

To protect saltmarsh from loss and effectively manage saltmarsh that is subject to disturbance it is necessary to know the distribution of this type of vegetation (see Chapter 10) and identify the threats to be minimised or eliminated. The main threats to saltmarshes are highlighted in the sections that follow.

Urbanisation

Saltmarshes around Australia have been reclaimed as part of agricultural, industrial, port and residential development (Kratovichil *et al.* 1972; Saenger *et al.* 1977; Adam 1981; Bucher and Saenger 1991; Zann 1997; Coleman 1998; Davis and Froend 1999; Finlayson and Rea 1999). In