



Review

A framework for the resilience of seagrass ecosystems



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ABSTRACT

Seagrass ecosystems represent a global marine resource that is declining across its range. To halt degradation and promote recovery over large scales, management requires a radical change in emphasis and application that seeks to enhance seagrass ecosystem resilience. In this review we examine how the resilience of seagrass ecosystems is becoming compromised by a range of local to global stressors, resulting in ecological regime shifts that undermine the long-term viability of these productive ecosystems. To examine regime shifts and the management actions that can influence this phenomenon we present a conceptual model of resilience in seagrass ecosystems. The model is founded on a series of features and modifiers that act as interacting influences upon seagrass ecosystem resilience. Improved understanding and appreciation of the factors and modifiers that govern resilience in seagrass ecosystems can be utilised to support much needed evidence based management of a vital natural resource.

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