



Government of **Western Australia**
Conservation and Parks Commission

Position Statement: sea wrack management in marine parks and reserves

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The Commission's Position

At times, requests were made by members of the public and Local Government Authorities regarding the removal of sea wrack from beaches in marine parks and reserves to alleviate odour, insect, safety and aesthetic concerns.

In principle, the Conservation and Parks Commission (Commission), as the statutory body in which marine reserves in Western Australia are vested, does not support the removal of sea wrack from any area declared as marine park, marine nature reserve, or marine management area under the *Conservation and Land Management Act 1984*.

However, the Commission considers that relocation of sea wrack within a marine park or reserve can be undertaken where public access is significantly impeded to popular recreational beaches and facilities, such as boat launching ramps. Sea wrack should be appropriately relocated within the marine park or reserve to ensure that the intrinsic value of sea wrack in ecosystem functioning is maintained. Relevant approval/s should be sought before any relocation occurs.

Context and Background

Definition of Sea Wrack

Beaches often accumulate sizeable stocks of marine detritus, commonly referred to as wrack. Wrack deposits can include materials such as detached macroalgae and seagrass, and animal derived materials, such as carrion and waste products. This marine macrodetritus that accumulates along beaches is an important component of the flow of nutrients and carbon that can occur from marine to terrestrial systems. Further detail is provided in the Appendix.

Implementation

The following outcomes have been identified for guidance in the implementation of this position statement:

- the Commission's position on the management of sea wrack is clearly articulated and available;
- there is no loss of nutrients within the marine park or reserve as a result of the removal or relocation of sea wrack;
- safety risks to the community (e.g. access to boat ramps) in marine parks and reserves, as a result of sea wrack, are managed within acceptable levels; and
- concerns regarding sea wrack odour, associated increase in insects and annual levels of amenity values to neighbours and visitors to marine parks and reserves are managed adequately.

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Appendix: Additional information on sea wrack

Marine macrodetritus that accumulates along beaches is an important component of the flow of nutrients and carbon that can occur from marine to terrestrial systems. Beaches around the world often accumulate sizeable stocks of this marine detritus, commonly referred to as wrack (Walker *et al.* 2001). Wrack deposits can include materials such as detached macroalgae and seagrass, and animal derived materials, such as carrion and waste products. The accumulation of wrack is a very important issue throughout southwestern Australia, as the large and diverse seagrass populations there are of global significance (Walker 2000 & Carruthers *et al.* 2008). This material, often regarded as a nuisance by the general public, is of vital importance to ecosystem processes (Coupland *et al.* 2008), particularly in supporting food webs (Smit *et al.* 2005, 2006) in our nutrient poor coastal waters.

Despite the dynamic nature of wrack habitats, they have been reported to support abundant populations of insects and arachnids (for example, Polis & Hurd 1995; Ochieng & Erftemeijer, 1999). Deposits play an important role in supporting terrestrial food webs particularly where highly productive marine ecosystems are adjacent to semi-arid environments, as in the islands of the Gulf of California (Stapp & Polis 2003).

The significance of wrack for juvenile fish and associated invertebrates in Western Australia has been reported by Lenanton *et al.* (1982) and Robertson & Lenanton (1984), and more recently by Crawley *et al.* (2006) and Crawley & Hyndes (2007).

The importance of sea wrack to healthy ecosystem function, as well as the periodic and transient nature of the presence of sea wrack, is generally considered to outweigh the perceived 'nuisance' value of sea wrack to the community.