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SEASCAPES ESTATE
STAGE 12
FORESHORE MANAGEMENT PLAN



DEVELOPMENT SERVICES
APPROVED
Hartley
DATE 19/10/04
6/17/10/04
CITY OF MANDURAH

2.2 Vegetation and Flora

A vegetation survey was undertaken by a botanist within the Seascapes foreshore reserve area in July 2002. The area was surveyed intensively for condition of vegetation, weed prevalence and rehabilitation requirements.

Vegetation in the area has previously been described by Alan Tingay and Associates (1995) in the Halls Head South Flora and Vegetation Survey. Areas described in the above survey that are applicable to the current survey include:

Primary Dunes -- Sand

- *Spinifex longifolius* Open Grassland
- *Spinifex hirsutus* Open Grassland to Grassland
- *Tetragonia decumbens* Low Shrubland
- *Olearia axillaris* Shrubland
- *Acacia rostellifera*/*Olearia axillaris* Shrubland to Closed Heath

Primary Dunes – Limestone

- *Scaevola crassifolia*/*Templetonia retusa* Low Open Heath
- *Melaleuca huegelii*/*Acacia rostellifera* Low Open Heath to Closed Heath

The vegetation of the near coastal foredunes was considered by Alan Tingay and Associates (1995) to be more complex than that occurring in the Perth Coastal Region due to the presence of Quindalup sand dunes intermixed with areas of outcropping limestone.

The current vegetation survey identified areas ranging from good to poor condition within the foreshore reserve. Communities in good condition were found to occur on the dune ridges, which consisted of communities ranging from Open Low Heath to Closed Heath. The species present included *Olearia axillaris*, *Spyridium globulosum*, *Templetonia retusa*, *Scaevola crassifolia*, *Rhagodia baccata* subsp. *baccata*, *Acacia rostellifera*, *Hardenbergia comptoniana*, *Spinifex longifolius*, *Pimelea ferruginea*, *Alyxia buxifolia*, *Diplolaena dampieri*, *Melaleuca huegelii*, *Lepidosperma ?gladiatum*, *Acanthocarpus preissii*, *Grevillea preissii* subsp. *preissii*, *Threlkeldia diffusa* and various other species. Additional species likely to occur in the area include *Sporobolus virginicus*, *Isolepis nodosa*, *Phyllanthus calycinus* and *Carpobrotus virescens*.

A community in poor condition (ranking 4, Figure 2) was observed on dune faces and was a Low Open Shrubland predominantly containing *Scaevola crassifolia*, *Spinifex longifolius*, *Olearia axillaris* and at times *Spinifex ?hirsutus*.

Communities of poorer condition were also noted on some areas of the dune ridges, where human access pathways were visible and weed invasion was evident. Areas of very degraded condition (ranking 3, Figure 2) are likely to have been degraded due to previous land usage, including grazing.

The Outline Development Plan notes that the dunes system in the Seascapes Estate has already undergone significant, successful rehabilitation since 1978 including reshaping of disturbed dunes, controlled access to foreshore areas via walkways and foredune and secondary dune replanting and stabilisation.

Some species that appear to have been planted in the northern end of the survey area include a mallee Eucalypt species and several apparently planted *Melaleucas*, which were observed both within the northern end of the survey area and in a pocket in the southern half of the survey area. These plants are likely to have been a result of the previous rehabilitation work undertaken in the area. Removal of these plants is not required, though it is recommended that where rehabilitating areas in the future, local native species be used when replanting.

No Declared Rare and Priority Flora species were found during the vegetation survey. One species located in the survey, *Diplolaena dampieri*, is noted in Bush Forever (2001) as Significant Flora. This classification within Bush Forever is due to populations at the northern or southern limit of their known geographic range, and significant populations (applies to all Declared Rare Flora and Priority Taxa). The distribution of this species within the Seascapes foreshore area appears to be within the normal range of the species.

2.3 Existing Pathways

Several tracks have been forged through the foreshore reserve by pedestrians, in particular one parallel to the coastline extending along a significant length of the southern area of the foreshore reserve (outside the Stage 12 subdivision area). Uncontrolled pedestrian access to various vantage points has led to the localised introduction of weed species along such paths, but not to an unmanageable level.